Public Utilities

Volume 64 No. 13 December 17, 1959

LONG-RANGE PLANNING FOR PUBLIC UTILITIES
By Paul E. Weiland

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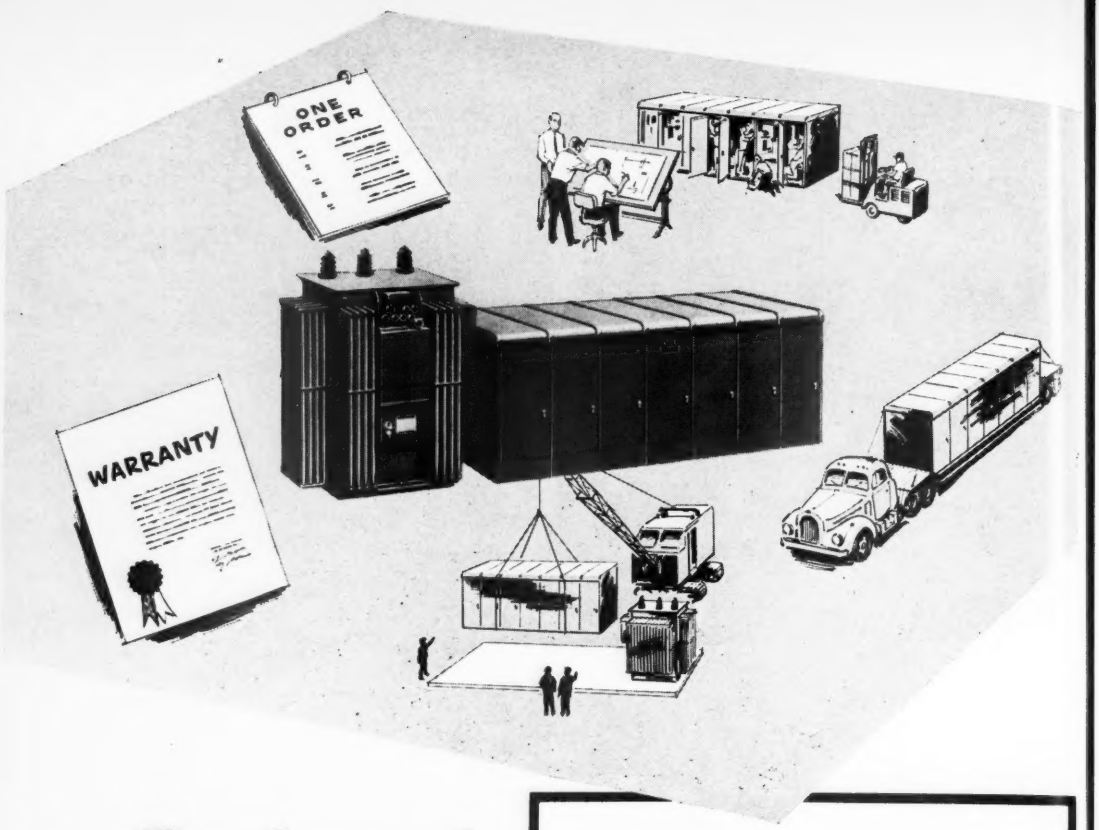
Public Utility Franchises—Are They Necessary?
By Thomas C. Campbell, Jr.

« »

Why Not Plump for Regulation Itself?
By James H. Collins

« »

A Utility President Looks at Area Development



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Public Utilities FORTNIGHTLY

VOLUME 64 DECEMBER 17, 1959 NUMBER 13

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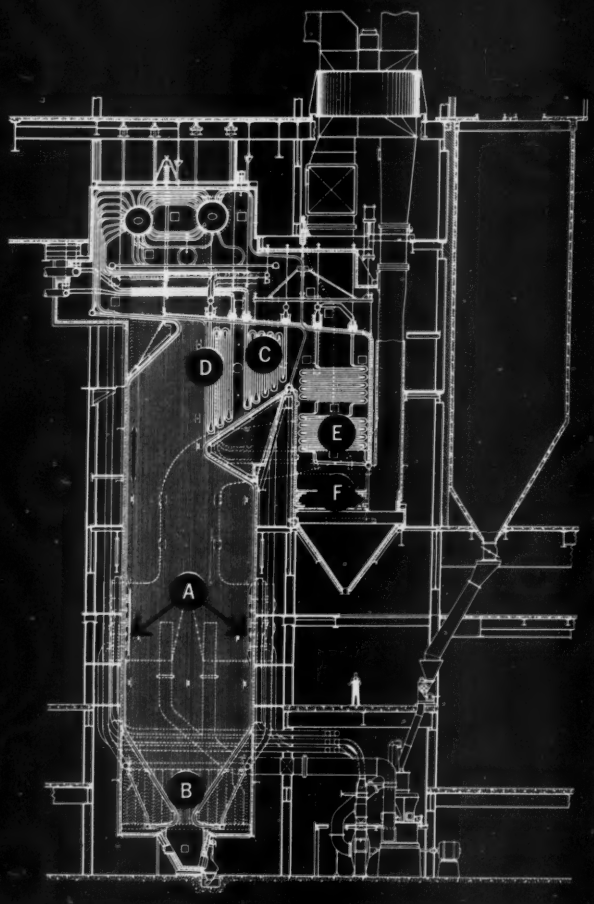
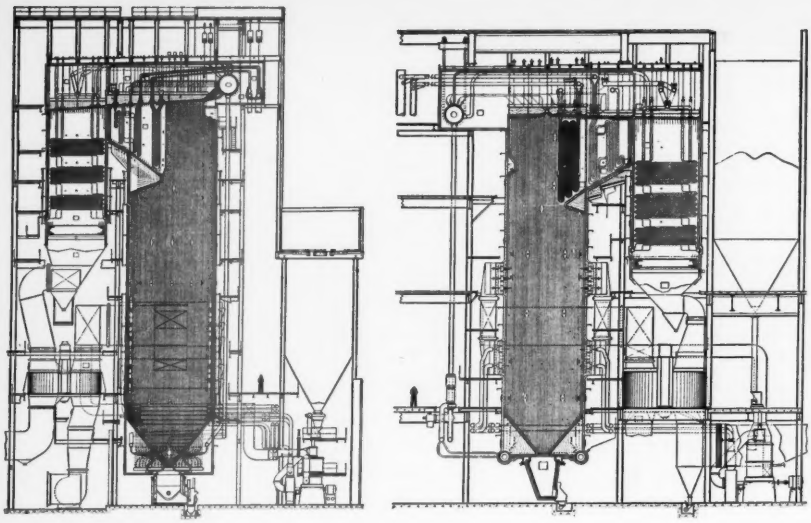


This unit, placed in service at the Edgar Station of the Boston Edison Company in 1949, represented the original C-E design concept of a properly arranged reheat boiler. Its chief characteristics were: tangential firing Ⓐ with tilting burner nozzles to control reheat and superheat temperatures; a dry bottom furnace Ⓑ; reheater surface Ⓒ between the finishing superheater Ⓓ, located at the furnace exit, and the primary superheater Ⓔ in the back pass; economizer surface Ⓕ below the primary superheater. For the period from August, 1949, to December 31, 1958, this unit had an average availability* of 94.5% and an average capacity factor** of 98.4%.

**Average Availability—In service or available. Not considered available while down for inspection or repair, or while in the process of starting up or shutting down.*

***Average Capacity Factor—Ratio of average hourly output—net kw—to rating of turbine-generator.*



These two recent reheat designs (left — natural circulation; right—controlled circulation) demonstrate the basic similarities between Combustion's first post-war reheat design, as represented by the Edgar installation, and its present-day reheat designs.

to Reduced Power Costs

The average rate of fuel consumption per kw-hr over the past decade has decreased from 1.30 lb in 1948 to .905 lb in 1958—a reduction of about 30 per cent. While an important part of this economic gain must be credited to the adoption of higher steam pressures and temperatures, the principal part has resulted from the widespread adoption of the reheat cycle.

C-E's role in the development and application of post-war reheat boiler design has been a major one. The first C-E unit of this design, ordered in 1947 by Boston Edison Company† for its Edgar Station, went into service in August, 1949. As of now—a decade later—a total of 279 reheat units, including 119 of the controlled circulation design, have been ordered by American utilities for an aggregate capacity of 39,100,000 kw. This is equivalent to more than one-third of the total steam-generated capacity of the utility industry as of the first of this year. Of the 279 units, 208, with a capacity of over 26,000,000 kw. are in service.

System generating costs are importantly affected by continuity of service of the more efficient units. The remarkably fine performance of C-E Reheat Units in this respect is evident from the records of 150 units, on which data are available from start-up dates to the end of 1958. The composite record of these units shows an average availability of 95.07% and an average capacity factor of 92.9%. The operating records of these units for the periods covered add up to a total of 560 boiler-years of service.

The consistently good performance records of C-E reheat installations is primarily attributable to the soundness of the original design concept. While numerous refinements and improvements of design detail have been made through the years, the basic arrangement of principal components has remained the same as evidenced by the accompanying drawings of the first unit (Edgar Station) and two recent units.

†Boston Edison also pioneered in the early development of the reheat cycle, having installed the country's first 1200-psi reheat boiler in 1925.

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Pages with the Editors

EVEN with Congress out of session, the legislators here in Washington have been keeping themselves busy. In the past weeks, no less than three major investigations have been under way and the halls of Congress may be quiet but the committee rooms have been buzzing.

THE House Subcommittee on Legislative Oversight has produced a rash of headlines with its look into the TV quiz shows. The committee has turned up what at best might be called a lack of conscience regarding program content and veracity. Just what sort of legislative remedy will be proposed remains to be seen.

PAUL E. WEILAND

ONLY recently the Senate Subcommittee on Administrative Practices and Procedures heard testimony from the chairmen of the "big six" regulatory agencies. The hearings were set up to gather the comments and feelings of these bodies regarding proposed legislation to prevent undue influence on behalf of cases before the regulatory commissions. Senator Hart (Democrat, Michigan) observed that the gist of the testimony seemed to be that "it would be nice if something could be done but it can't."

LEGISLATION in these two fields is filled with difficulty since any measures enacted would border on the legislation of morals. How far may TV regulation go before it becomes censorship? What safeguards can be enacted covering ex parte conversations which will not result in the strangulation of the commissions? These are grave problems which are now being studied.

WE notice too that the House Committee on Ways and Means is looking into the matter of taxes. For a change a legislative committee is considering the entire tax scheme rather than attempting to amend the already much amended tax code. The federal income tax law has been patched so many times that it is more patch than fabric and this group may propose some sweeping tax changes when all the testimony is in.

ANOTHER interesting dispute, which the House Ways and Means Committee ran into and which will certainly interest utilities from two different directions, is the proposal to eliminate the federal tax exemption for interest on state and local bonds. From one direction it might be said that electric utility companies in particular would bear up bravely—to say the least—under any burden which the Treasury saw fit to levy on state, municipal, and other nonfederal government financing. Such financing, of course, embraces more and more the field of public works projects in the electric power facility area.

THE other reason why such an additional financial burden on state, municipal, district, and other government operations would be viewed quite sympathetically in the commercial utility company field is simply a matter of money market competition. The states, cities, etc., for decades have had to get their money in the same market place in competition with taxpaying industry, including the utility companies. The tax exemption has been a tre-

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mendous advantage not only economically but politically because of the difficulty in explaining money cost disparities to a disinterested public.

IT would be too early, of course, to expect any definite result or even marked progress on proposals for such a radical departure from our traditional policy of subsidizing local government operations through tax exemption. But the pressure of superior economic forces will continue to require Congress to face up to the patent anomaly of encouraging tax-exempt government expansion into the field of tax-paying business operations by the very process of tax diversion from the tax-paying to the tax-eating segments of our economy. There will have to be a lot of education and a lot more pressure before Congress will come to grips with such a political hot potato. It certainly will not happen in 1960 and whether it happens thereafter will depend to a good extent on the turn of the political wheel less than a year hence. But such as it is, the House hearings along this line might well be regarded as a small Christmas present for the utilities, which could well grow to more important proportions in the years to come.

THE first article in this issue deals with the present inflationary pattern and the increasing cost of capital in relation to public utility rates. This article comes to us from PAUL E. WEILAND, director of utilities, Ohio Public Utilities Commission. MR. WEILAND received his degree as an electrical engineer at the University of Notre Dame in 1917. He has served on a number of committees of the National Association of Railroad and Utilities Commissioners, and is also a commissioned graduate of the U. S. Navy School of Steam Engineering.

THOMAS C. CAMPBELL, JR.

* * * *

ON page 977 is an article by PROFESSOR THOMAS C. CAMPBELL, dealing with the subject of public utility franchises. PROFESSOR CAMPBELL holds the chair of economics at the West Virginia University and his prime teaching activities are centered around the public utilities and transportation. He received his AB degree at Lynchburg College, class of '42, and then went on to receive his doctorate from the University of Pittsburgh in 1958. His article in this issue, entitled "Public Utility Franchises—Are They Necessary?" explores the subject of franchises from the basic concept of the franchise itself to the more complex implications of recent court rulings.

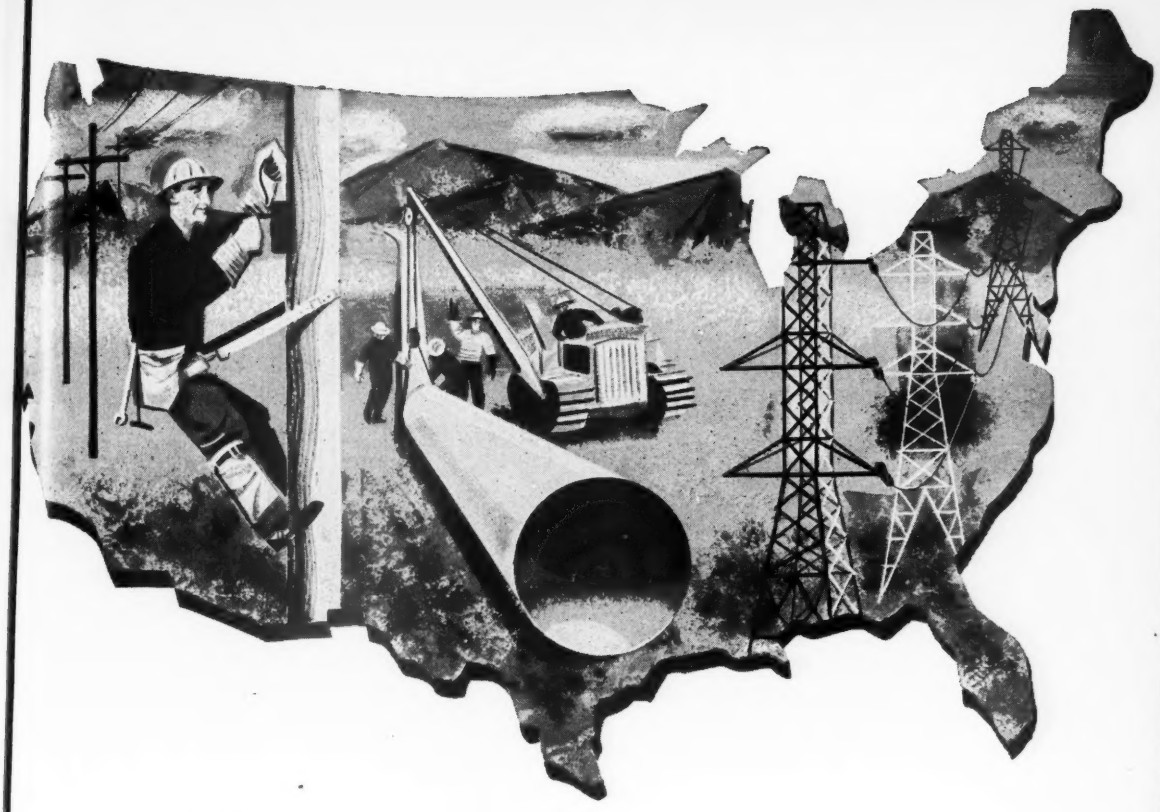
* * * *

JAMES H. COLLINS, a business magazine editor and free-lance writer, asks "Why Not Plump for Regulation Itself?" in his article beginning on page 986. MR. COLLINS would have the public relations men do a bit of promoting for the process of regulation itself. In the public's eye the utilities and the commissioners often seem to be enemies and this article proposes that the public be informed of the rate-making process so that this error can be cleared up.

WE take this occasion to wish all our subscribers and friends a Merry Christmas and a happy and prosperous New Year.

THE next number of this magazine will be out January 7th.

The Editors



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(January 7, 1960, issue)

★

THE OUTLOOK FOR PUBLIC UTILITIES—1960

The year 1960 will see the beginning of the second session of the 86th Congress. The work of this session has particular significance since 1960 is a presidential election year. As in the past, Francis X. Welch, editor of PUBLIC UTILITIES FORTNIGHTLY, will write his "forecast" of coming events in Congress and the federal agencies. Mr. Welch will look at the New Year from the point of view of what may happen to the utility interests and why.

PITFALLS TO AVOID IN CANADIAN UTILITY REGULATION

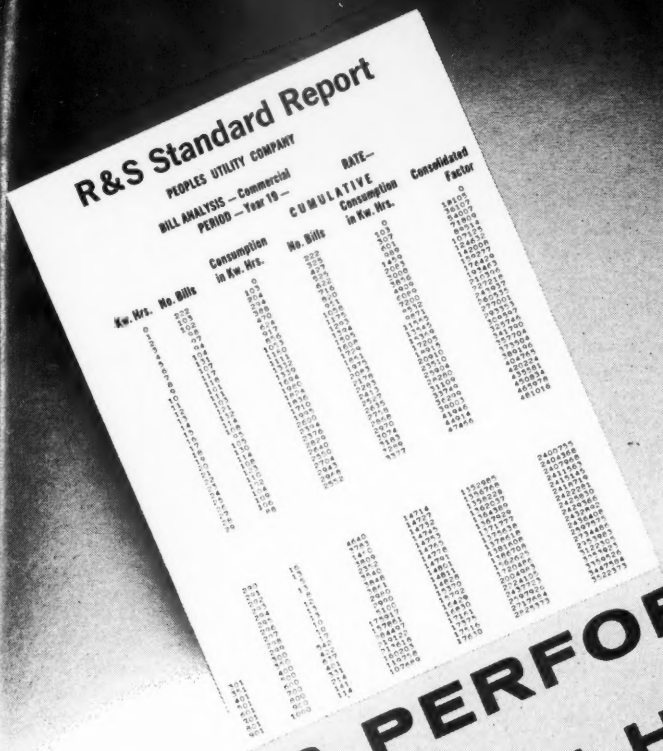
Peter Jaffray, director of the board of Dominion Securities Corp. Limited, examines utility regulation in Canada and observes that our northern neighbor is in a position to avoid a number of errors that other regulatory bodies have fallen into. Mr. Jaffray urges a common sense approach to the problems of regulation after **all** factors relating to the problem have been examined and studied. He is well aware that not only must the public be served but that the economic well-being of the utility company must also be considered. A most interesting article relating to Canada's regulatory policies.

THE UTILITIES' CRYSTAL GAZERS

As communities expand the utility companies are constantly faced with the problem of making long-term forecasts of demands, growth, etc. The person in the individual company who performs this vital function has many names, ranging from "planning engineer" to "residential sales manager." John J. Hassett, industrial magazine editor of Washington, D. C., examines the complex job of these seers who must estimate the increased loads, plan for new lines, and the thousand and one things which enable a community to expand. Such men must gaze into the crystal ball and forecast new demands which will come about through the use of appliances which are still on the planning board. Mr. Hassett outlines the vast complex of such planning and notes that every utility must have a man with the fortitude to take the calculated risk and he believes that this vital job is one of the toughest in the utility organization.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***



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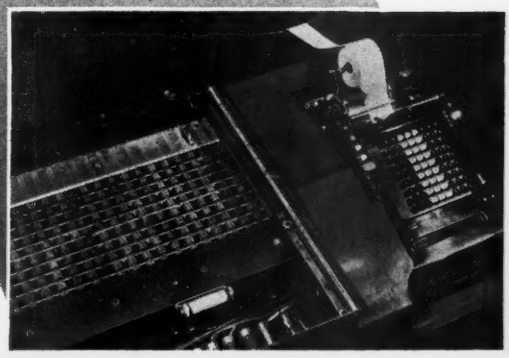

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Former president, Chamber of Commerce of the United States.

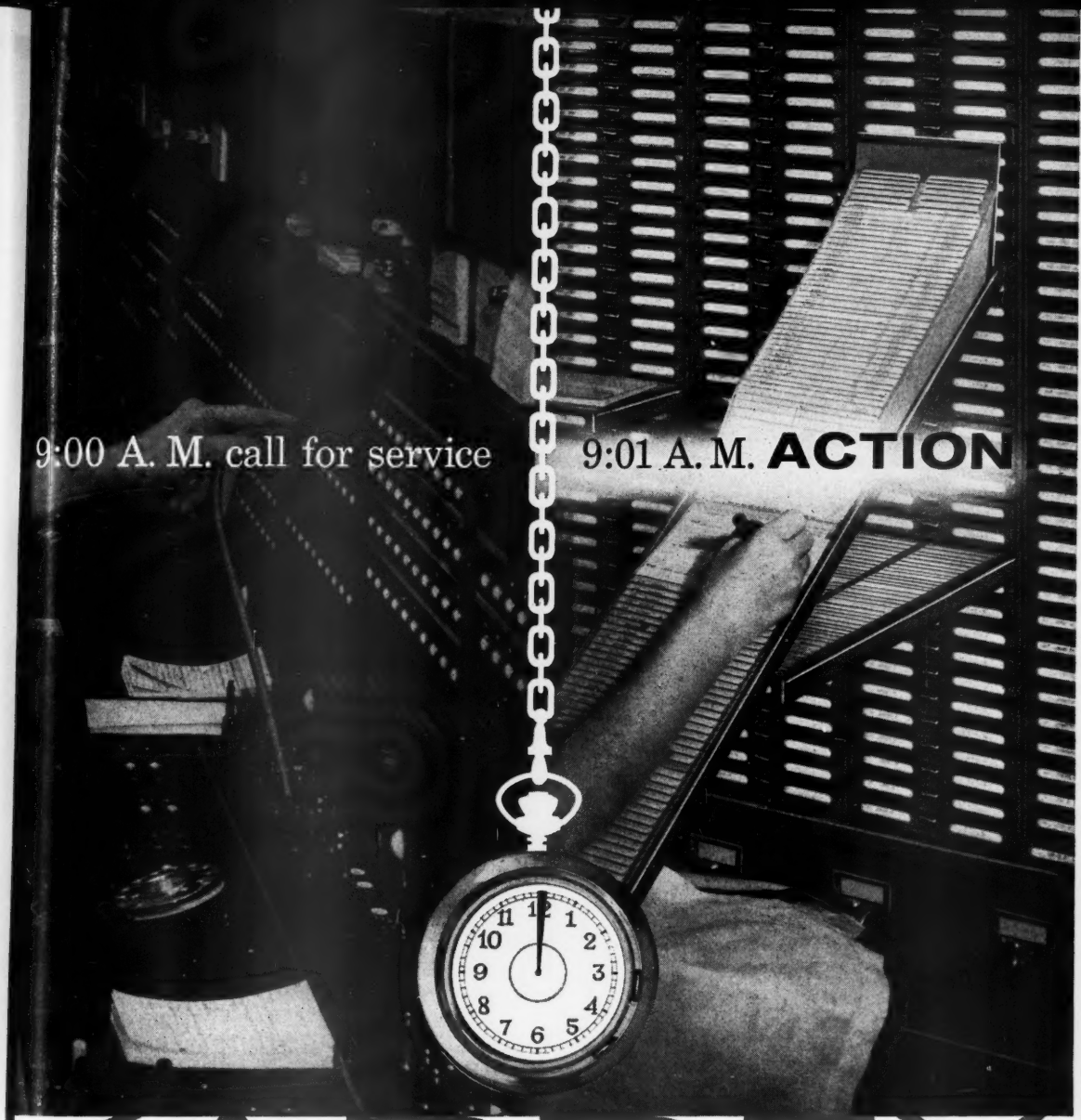
"The government today should be thinking . . . of collecting an increasing amount of money for its needs from a low rate of taxation applied to a rapidly expanding economy. Instead, it is collecting a small amount of money from high rates that put a drag on the economy's expansion, and are actually drying up the wells of progress."

NEIL H. JACOBY
Dean, UCLA Graduate School of Business Administration.

"Inflation raises the most difficult political problems because it puts the general interest in a dollar of stable buying power against many organized and articulate special interests. All groups must be educated to understand that our common welfare depends upon an efficient American economy competing in open markets and capable of flexible adaptation to change."

S. C. HOLLISTER
Dean, College of Engineering, Cornell University.

"What is there in this power situation that should receive the active attention of businessmen generally? Power is the energizing force of all industry. Control of this force by government operation affords a powerful entry by government into the remainder of the industrial activity of the country. Any act, therefore, on the part of business which condones expansion in the power field can well be an act which, in the end, will be inimicable to the business world itself. You cannot have just a little bit of Socialism. You either have it or you don't. We must realize that this trend is on the march and that our action with respect to it will be the determining factor in the form our government will assume in the years to come."



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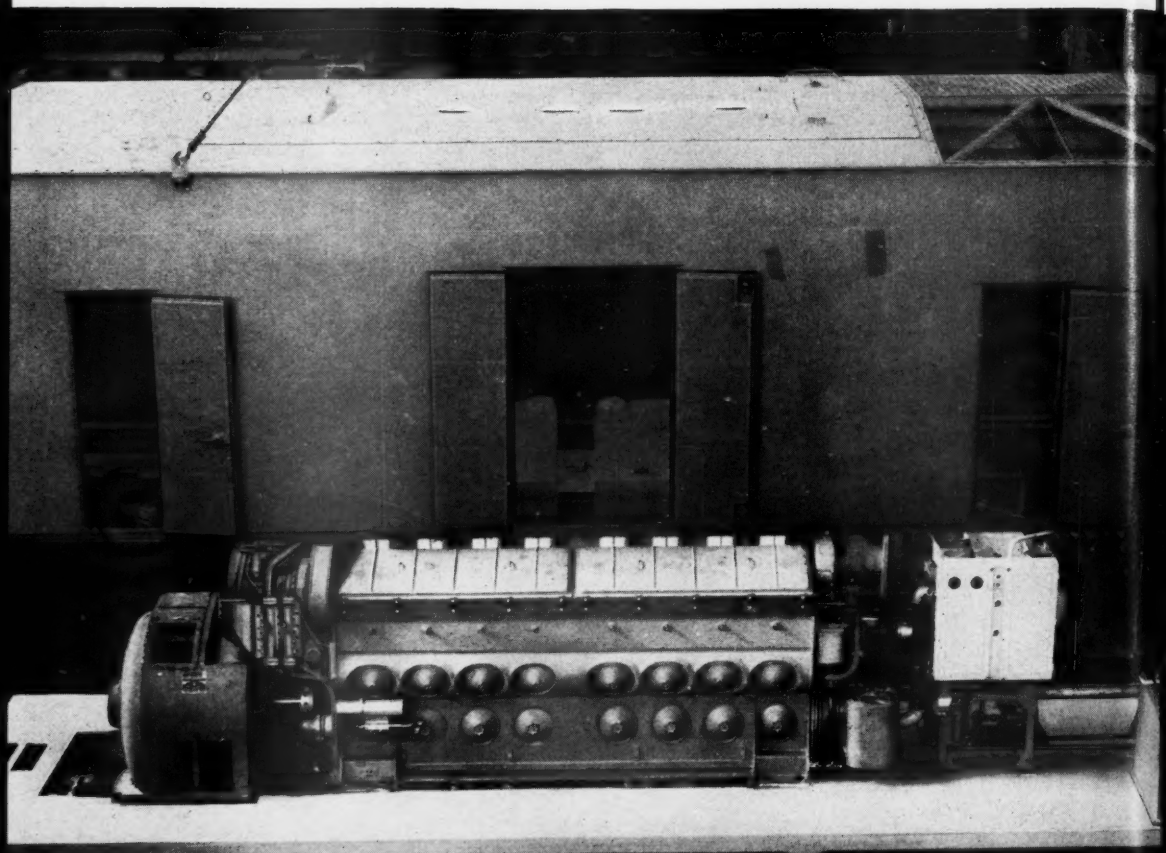

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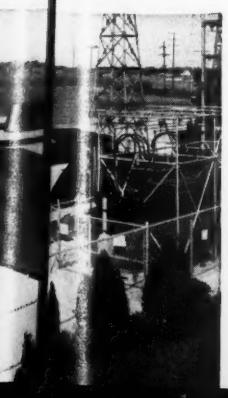

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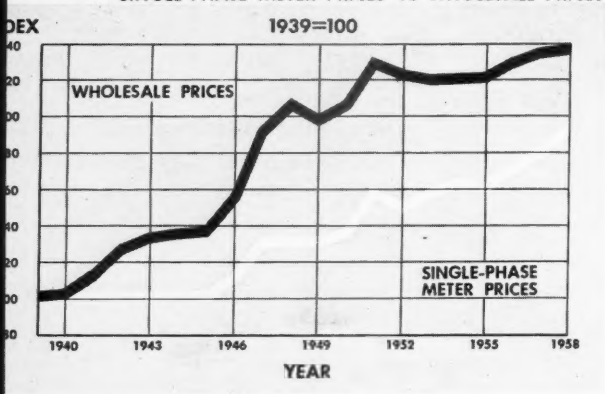

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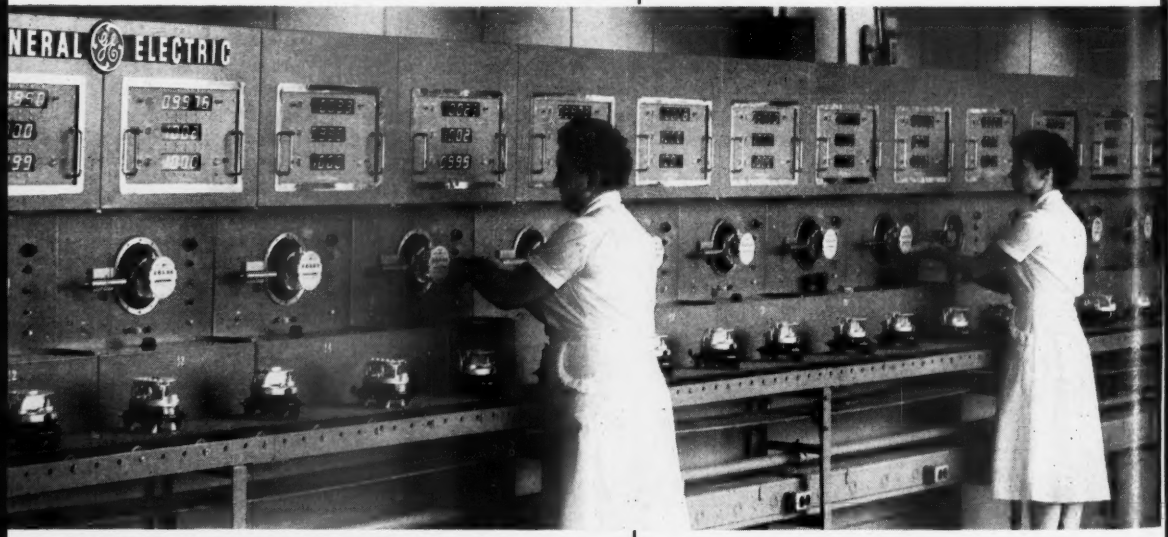

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DECEMBER-JANUARY

Thursday—17 *Southern Gas Association, Sales Section, will hold round-table conference, El Paso, Tex. Jan. 8, 1960.* ***Advance notice.***	**Friday—18** *National Retail Merchants Association will hold annual convention, New York, N. Y. Jan. 10-14, 1960.* ***Advance notice.***	**Saturday—19** *Industrial Heating Equipment Association will hold meeting, Philadelphia, Pa. Jan. 18, 19, 1960.* ***Advance notice.***	**Sunday—20** *American Gas Association The Metropolitan Gas Heating and Air Conditioning Council will hold meeting, New York, N. Y. Jan. 20, 1960.* ***Advance notice.***
Monday—21 *New England Gas Association, Operating Division, will hold meeting, Boston, Mass. Jan. 20, 1960.* ***Advance notice.***	**Tuesday—22** *Edison Electric Institute-American Gas Association, Taxation Accounting Committees, will hold joint meeting, St. Louis, Mo. Jan. 20-22, 1960.* ***Advance notice.***	**Wednesday—23** *Edison Electric Institute, Transmission and Distribution Committee, will hold meeting, St. Petersburg, Fla. Jan. 21, 22, 1960.* ***Advance notice.***	**Thursday—24** *Pennsylvania Electric Association, Systems Operation Committee, will hold meeting, Philadelphia, Pa. Jan. 21-26, 1960.* ***Advance notice.***
Friday—25 *Merry Christmas, 19591*	**Saturday—26** *Oklahoma Utilities Association, Accounting Section, will hold meeting, Tulsa, Okla. Jan. 22, 1960.* ***Advance notice.***	**Sunday—27** *National Association of Corrosion Engineers will hold short course, Houston, Tex. Jan. 22, 23, 1960.* ***Advance notice.***	**Monday—28** *Hydraulic Institute will be held, Hot Springs, Va. Jan. 25-27, 1960.* ***Advance notice.***
Tuesday—29 *Canadian Electrical Association, Eastern Zone, will hold meeting, Quebec, Canada. Jan. 25-28, 1960.* ***Advance notice.***	**Wednesday—30** *National Association of Purchasing Agents, Public Utility Buyers Group, will hold mid-winter meeting, Atlanta, Ga. Jan. 31-Feb. 2, 1960.* ***Advance notice.***	**Thursday—31** *American Institute of Electrical Engineers will hold winter meeting, New York, N. Y. Jan. 31-Feb. 5, 1960.* ***Advance notice.***	**1960** **JANUARY** **Friday—1** *Happy New Year, 1960!*


Season's
Greetings

Public Utilities
FORTNIGHTLY

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Long-range Planning for Public Utilities

By PAUL E. WEILAND*

Long-range planning programs seem like the soundest course for utilities today to offset to a degree the upward pressures on rates. Piecemeal efforts are costly. Far better to reduce current earnings by anticipating needs. Planned expansion pays off in the end, both to the user and provider of service. Regulators, too, have a responsibility—that of revising their thinking and embracing the future in determining rates.

More than a hundred years ago Thomas Carlyle made the observation, "The degree of vision that dwells within a man is correct measure of the man." In the years that lie ahead the degree of vision that dwells within management will be the determinant of the future of free enterprise in our nation.

In the period since the close of World War II this nation has experienced industrial expansion unprecedented in history. A close look at that expansion discloses that it holds no assurance for the future. The springboard for that expansion was the accumulated demand for those things that were unavailable during the war years.

To meet that demand facilities were retained that would have been replaced in a more competitive economy. Availability was often the prime consideration in selection of additional productive capacity. Since 1947 private business in the USA

*Director of utilities, Ohio Public Utilities Commission. For additional personal note, see "Pages with the Editors."

has invested $291 billion in new plant and equipment. However, of the $291 billion, about $157 billion has been for expansion of capacity. For replacement of old facilities only $134 billion has been spent. Today, about half of our industrial equipment in use was installed prior to December, 1945.

We are now out of the recession of 1957-58 and indications point to a continuing upturn in the economy. But all signs point to a period of expansion with a more competitive economy and with growing inflation.

Inflation and the Future

TODAY, the general subject of inflation is receiving more attention from the public, government officials, business executives, labor leaders, and economists than in the past. In the last decade the government's measure of how much it costs to live has gone up in eight years and down in only two, 1949 and 1955. To find a third year when the index moved downward you must go back to 1939—before World War II when the cost of living was about one-half of what it is today.

All parties agree that at least in duration, if not in make-up, the current inflation is out of the ordinary. Inflation has always occurred during wars, yet at no other time have prices continued to rise long after the economy returned to peacetime normality. Heavy government spending, easy money, and demand outrunning supply are the traditional elements of inflation. At present money has been tight for months and the outlook is for greater stringency; there are no shortages of goods, yet prices continue upward.

Business leaders point out that wages have increased faster than output per man. Labor leaders maintain that management profits are to blame, pointing out that price increases have yielded substantially more dollars in revenue than required for wage increases. Economists point to these and other factors; namely, the national commitment of both political parties to full employment, the tendency of wage hikes won by unions in highly organized and highly efficient industries to spread to less efficient labor areas; the high value placed by society on labor "peace," the heavy industrial investment in expansion, and the nation's booming population.

As of now, any expectation of abatement of inflation would appear to be nothing more than a wishful triumph of optimism over experience. Despite the present precarious financial conditions of the federal government, the present and prospective political posture is such that, regardless of what political party is in power, we will have growing inflation.

IN such a prospective economic atmosphere the need for tomorrow is the most efficient utilization of invested capital to obtain the maximum of ultimate economy and to increase output per man-hour. Output per man-hour (in manufacturing) has increased only 2.5 per cent per year since 1951. During the years 1947-50 gains of 4 per cent were achieved and over 5 per cent in the 1920's. Today machines and techniques are available to equal or exceed those records. Industry is aware of the necessity for their utilization.

In the recession of 1958 U. S. industry invested 12 per cent less in facilities than in 1957, but increased expenditures for research by 14 per cent.

Importance of Planning

FOR all the industry of our nation long-range planning is essential to meet the problems of tomorrow. This is especially true for the public utilities of the nation.

Contending with Upward Rate Trend . . .

GROWING inflation and higher costs of capital will exert more pressure for upward revision of utility rates. This is especially true in the case of a utility that is faced with the problem of major plant expansion to meet increasing service demands. Lacking any offset, earnings adequate today under the present level of rates will become inadequate tomorrow. There are, however, a number of factors which hold forth some promise of at least mitigating this upward pressure on utility rate levels over the long pull. Success in this respect hinges on the manner in which utility operations are conducted. Fundamentally, it is a question as to whether utility management functions with the long-term view in mind, or must tailor the pattern to accomplish short-term results.

For example, if utility plant is constructed on a wholesale and stabilized basis, with the ultimate usage as the determining factor, utility service can be produced over the life of such plant at a cost lower than would be required if the plant were constructed on a piecemeal, start-stop basis.

Building just what is needed for today's demands, then putting in additions soon after to meet tomorrow's requirements, is expensive. The dollar outlay may be held down today but in the end unit costs go up. Engineering work must be repeated. If a building must be added to, the addition costs more per cubic foot. Two small cables cost more for initial installation and maintenance than one that is twice the size. All along the line piecemeal building costs more and produces a compromise design as compared with that produced by a comprehensive project, properly designed.

A FEW examples of purely local situations, as distinguished from the broader problem of co-ordinated system planning, will illustrate this. Decentralization of industry and deurbanization of

residential development create planning problems for the utility industry.

Examples of Need for Planning

A DEVELOPMENT in an outlying area may be supplied with telephone service either from an existing exchange or by the establishment of a new exchange. The utility electing to supply service from an existing exchange in order to hold the immediately required investment to a minimum will find the distance from the development to the existing central office sufficient to require the use of coarse gauge cable for satisfactory transmission. The entire design of outside plant for the new development must be patterned for service from the existing exchange. With subsequent growth the ultimate plan to serve this area will require a new central office properly located with reference to the present and prospective development.

The utility that elected to initiate service from an existing exchange will, upon the establishment of service from a new exchange, find itself ultimately saddled with the additional investment in the coarse gauge cable no longer required, with additional investment for rearrangement of outside plant in the development to adapt it to service from the new exchange and with an extensive number change program. It will also find itself encumbered with unrequired margins of plant in the old central office.

ELECTRIC service may be supplied from an existing substation or from a new substation. The financially weak company may hold the immediate investment to a minimum by an extension of feeders from an existing substation. Heavier feeders and voltage regulators will be required to prevent excessive voltage fluctuations. Eventually, with continuing growth, a new substation located with reference to the present and prospective load center will be required. When service is supplied from the new substation the capacity of the originally installed feeders cannot be efficiently utilized in the furnishing of service in the future. The company will have the additional expense of rearrangement of the distribution system in the development to the plan required for service from the new substation. Zoning restrictions and right-of-way difficulties may require substantial installation of underground transmission to supply the new substation, an additional investment that could have been avoided in an earlier installation.

Gas may be supplied from a new regulator station or by extension of low-pressure mains from an existing regulator station. The company electing to hold the initial investment to a minimum will extend mains from an existing regulator station. Future growth will eventually require that the area be supplied from a new regulator station. When service is so supplied the originally installed mains will have capacity that cannot be efficiently utilized. The distribution system in the development will require changes for service from the new regulator station. The company will be burdened with the expense of removing and replacing paving and sod in tree lawns, an expense that would have been avoided had the development been supplied originally from a new regulator station.

THE above examples are but a few of the many situations where planning

for the long pull will work to the ultimate advantage of both the user of service and the provider of service. In such planning, timing is of the utmost importance. There is an optimum time for each major project. Without timing, demands for service may force the adoption of the short-range plan to provide the required service at an earlier date.

The Key to Adequate Earnings

PUBLIC utilities have a high investment per dollar of annual revenue and this investment is for the most part in long life property. For economical operation it is therefore necessary to achieve the most efficient utilization of the invested dollar over the life of the property. However, such a program, which has favorable long-range cost implications for the utility customer, involves the utility itself in higher initial capital commitment, together with its depressing effect on current earnings, and the assumption of a longer-term risk.

In the utility operating field there are similar possibilities. Expanded research and long-range employee training may well produce increased efficiencies in the future years, even though expenditure for such purposes today results only in reducing current earnings.

Market development for new services or new utilization of existing services holds excellent possibilities for improvement in operating conditions and consequent betterment of earnings in future years but earnings in the interim must be sufficient to provide for the financing of research and promotion.

WITH some margin in current earnings, utility management can safely adopt these programs which operate for the long pull—the programs which promise in the long run to provide some offset to the continuing upward pressure on utility rates.

However, if a utility management considers that earnings are already at an inadequate level, it will be likely to adopt only the short-term programs which minimize or eliminate risk and the immediate impact on earnings.

Recognition of this particular function performed by adequate earnings is somewhat new to the field of regulated utilities. In unregulated industry it has long been apparent that the management of those companies whose earnings have afforded them the opportunity to operate for the long pull are producing, on a quality-price balance, the goods that the consumer prefers.

Rates of Return and Rates

THE RESULTS of a study published in the June 16, 1958, issue of **Electrical World** show that residential rates are lower for those electric utilities having the highest rates of return than for those companies having lower rates of return. The article states: "While only good management can initiate better earnings, the continuance of good management is in turn dependent on sustained good earnings. This type of management will be able to operate more economically, less on a piecemeal basis, and with long-range economies in mind. In other words, good earnings must result in economies which management is able to pass along to consumers."

A similar relationship between earnings and rates is found in the telephone industry. In general the Bell companies with the better earnings have lower than average rates for the system, a higher percentage of telephones converted to dial, a higher percentage of operator toll dialing, and a wider range of extended area service.

FOR public utilities long-range planning poses problems not encountered by unregulated industry. For all segments of industry the first requisite for long-range planning is adequate earnings, present and prospective. In prosperous times unregulated industry is free to accumulate and retain earnings for future expansion. If it elects to use accelerated depreciation it may do so with certainty that consequent tax deferments will be available for corporate use. Within competitive limitations unregulated industry is free to adjust price to cost.

Regulation precludes any certainty in respect to these matters for public utilities. There are no fixed formulas for public utility rate making, and when rates are eventually fixed, the provisions for earnings may vary greatly. Regulatory commission decisions that may not substantially affect overall rates may mean the difference between sufficient and insufficient present and prospective earnings for long-range planning.

"Used" and "Useful"

LONG-RANGE planning requires the provision of plant in excess of immediate needs. Earnings of a utility must be sufficient to enable it to carry required margins of plant. In a rate proceeding a strict interpretation of "used and useful" would exclude any provision for earnings on capacity beyond immediate requirements.

A recent decision of the Maryland court of appeals in the matter of Baltimore Gas & Electric Co. *v.* People's Counsel[1] places a broader construction on the phrase "used and useful": Early in 1958 the public service commission of Maryland granted to Baltimore Gas & Electric Company a $6,039,000 annual rate increase. In arriving at the amount of the increase the commission added to a rate base figured as of the end of 1927 the net additions to plant in 1958.

On appeal of peoples counsel, a Baltimore city court, on April 1, 1959, found the inclusion of the 1958 additions "unreasonable and unlawful," ordering the rate base reduced more than $30 million and a refund of more than $2 million of increased revenues to customers.

THE court of appeals on June 29, 1959, reversed the ruling of the Baltimore city court and sustained the finding of the commission. The view of the lower court that property not actually in service at the time of the company's application for rate revision was not used and useful in rendering service was found by the court of appeals to be "literal, rigid, and completely inelastic," adding that "The meaning and concept of the words 'used and useful in rendering service to the public' have been held to have a certain elasticity since the phrase first came into use." The court pointed out that it had long since been established, for example, that inclusion of property acquired and held in anticipation of seasonable future needs but not actually in service is proper. The regulatory

[1] 29 PUR3d 332.

body could include such property if it determined that the acquisition was necessary and its use might be anticipated with reasonable precision.

It is to be noted that in the finding of the court the propriety of the inclusion of property acquired and held in anticipation of future needs but not actually in service is conditioned on determination by the regulatory body of the necessity for its acquisition, which determination must be made on the record in the case. If findings of regulatory commissions are to be compatible with the policies of utilities which plan for the long haul, the burden is upon the applicant in a rate proceeding to present such testimony and exhibits as will justify the commission in making findings that will substitute the long-term interest of all for the immediate self-interest of a few.

Regulators Should Be Given New Facts

Recent decisions on public utility rates have evidenced an increasing awareness of regulatory commissions and courts of the necessity of taking into consideration the fact that the business world of today is experiencing the most rapidly changing economy the world has ever known and of making compensatory adjustments therefor. However, regulatory commissions can make only such disposition of matters as the record in the case can substantiate.

Rigid adherence to specified test year and a date certain rate base under the ground rules of twenty years ago is insufficient for constructive rate making today. With the usual regulatory lag, such bases when used, antedate the conditions when rates are fixed and are progressively inadequate during the period for which the rates are applicable. Exhibits and testimony submitted by applicants in rate proceedings today must be prospective as well as retrospective. They must be sufficient to show that provisions made in the establishment of rates today to enable utilities to carry out long-range programs will work to the ultimate benefit of the users of service.

It has often been said that advances in technology have proceeded at a much faster rate than have advances in the social science. It is safe to say that this truism is applicable to the field of utility regulation. The custom of regulating on the basis of past performance is still too much with us, with the time-honored basis of a "test period," and a rate base of property "used and useful in the rendition of service" as of a date certain.

Perhaps one of the most significant of recent rate orders was that issued by the public service commission of Wyoming in a telephone rate case on February 5, 1959.

In its order, the commission met the problem of inflation head-on. It used an "end of period" rate base, rejecting the use of average period investment as being unrealistic, and noted that in the two years following its last rate order the company had experienced a decline in its rate of return of 20 per cent despite efforts to introduce all possible economies in operations and to improve earnings by the sale of additional services. The com-

mission reiterated its statement made in a previous case test:

> We consider our duty to be twofold: First to see that the utility companies under our jurisdiction furnish an adequate quantity and quality of service; and, second, to be sure that the rates charged for such service are no more than just and reasonable. We cannot expect applicant to satisfy the first requirement unless its earnings are adequate to permit it to obtain the additional capital necessary for the expansion and improvement of its service.

The order went on to state as follows:

> Today, we are more convinced than ever that reasonable earnings will permit lower rates over the long pull because of the inherent economies which the company can exercise. In determining the rate of return which we should allow the company to earn on the rate base hereinafter fixed, we must take into consideration the general business and economic conditions prevailing now and in the foreseeable future. It must be carefully considered along with the test period and rate base in order to effect a proper balancing of the investor and subscriber interests, as well as to allow the company sufficient earnings to attract the required capital for further expansion and service improvements.

In the order quoted above, the Wyoming commission recognized that if the utility industries are to remain as a strong and healthy part of the growing American economy, there must be a forward look in the broad field of regulation activity. That the long-term interests of public utilities and their customers are identical.

In this, it is important that the consuming public have an understanding of the problem confronting both the commissions and the utilities in providing more and better service at fair and reasonable rates. That these problems are mutual problems, and that those who would turn them into mere bones of contention are, in the long run, serving the interests of no one.

How, then, can the common interests of both the user and provider of utility service best be served under regulation? Certainly not by restricting one's view to a picture of the past. Needless to say, in any rate-making process that will give consideration to the requirements of the future, the initiative lies with the utility. It may require completely new approaches to the time-honored procedures of preparing for and presenting rate applications, just as the utilities have developed new approaches to the solution of technical problems in the operation of the business. It requires that there be created a broader understanding on the part of the consuming public.

Constructive regulation must turn its face toward the future. There lies its primary responsibility.

Public Utility Franchises—

Are They Necessary?

A recent decision in a West Virginia court seemed to indicate that the utility franchise has lost much of its significance. Apparently adequate service transcends franchise obligations. And since the requirement to provide adequate service on the part of a utility is solely the responsibility of state and federal regulatory agencies, the value of a municipal franchise is questionable. However, the courts have not pointed out what a municipality might do to prevent a utility from operating within its boundaries after a frnachise expires.

By THOMAS C. CAMPBELL, JR.*

THE term "franchise" has had a wide variety of meanings and uses. In one sense, it has been defined as "a special privilege conferred by the government on an individual or individuals." It has also been referred to as "a grant from a sovereign power." It is sometimes used as a synonym for liberty, freedom, exemption, concession, and as a designation of privileges in general.[1] State constitutions show little consistency as to the exact meaning and limits to the meaning of the term. In some statutes, the language appears to limit it to privileges conferred by grants of a government to an individual. In others, it has been designated as a common law right exercisable by the public. Some state constitutions have designated certain rights as franchises while others have merely defined what is included in the term.[2]

Even though a particular right might have been a franchise under English law, it is not necessarily a proper subject for a franchise in the United States. Among the rights or privileges which have been considered to be franchises in this country are permission to use public rights of way for purposes other than those for which the rights of way were designed or constructed and to collect compensation for services rendered under provisions of the franchise.[3] A franchise is more than the right to carry on a particular business, as such a right is often covered by corporate charters or licenses which are distinctly separate and apart from franchises.

IN all franchises, private rights are secondary to the interests of the public. The receiver is to make no unreasonable use of the rights granted, and he is not to prevent the public from enjoying the greatest possible benefit without destroying the rights of the holder of the franchise.[4] Private organizations are allowed under franchises to perform legally public duties that would not be possible with-

*Professor of economics, West Virginia University, Morgantown, West Virginia. For additional personal note, see "Pages with the Editors."

out making use of the necessary public property.

Franchises, when granted and accepted, create obligations which are binding on both parties.[5] This does not imply that all contracts involving the right or privilege granted by a governmental unit to a private organization are franchises; but it does mean that when a definite franchise is granted, provisions specified in the franchise are binding on both parties and neither can withdraw from its obligations against the will of the other.

Who Grants Franchises?

"INHERENTLY only the sovereign power or state may grant franchises, and basically it (the state) is the grantor whether the grant is made directly or indirectly through a duly designated agent." [6] Therefore, only those organizations to which the state has delegated specific powers to do so may grant franchises. Consequently, municipalities derive their powers to grant franchises from the state and have only such powers as are specifically allowed by the state. Usually, these powers are designated in the municipal charters.

Powers of state legislatures to grant franchises or to delegate the powers to subdivisions of the state are limited to the provisions of the state Constitution. These legislative powers are, however, without limit unless specific limits are written in the Constitution.[7]

Franchises are usually granted to corporations; but legislatures, in nearly all states, have authority to grant them to individuals, if such grants appear to be in the public interest. Therefore, the fact that franchises, in nearly all cases, are granted to corporations is because corporations are virtually the only type of business organization performing services for which franchises are customarily granted.

A franchise becomes ineffective should the grantee be unable to carry out its provisions. As a consequence, granting of a franchise must be followed, within reasonable time limits, by making available to the public the service for which the franchise was granted.

Exclusive Franchises

EVEN though franchises are often exclusive, and usually are in the case of public utilities, exclusiveness is not an essential element. Consequently, franchises are not considered exclusive unless the express provisions to that effect appear in the franchise contract, as exclusiveness does not arise by implication.[8] However, unless there are constitutional limitations, legislatures are legally free to grant exclusive franchises. When an exclusive right has been granted in a franchise, this exclusiveness is strictly limited to the limitations expressed in the wording of the franchise and is not construed to go beyond its exact provisions.[9]

Courts have refused extension or enlargement of exclusive grants, for exclusiveness is not an inherent provision of a franchise and exists only in and to the extent of specific provisions to that effect. A state may not interfere with an exclusive franchise unless there are reservations of power in that regard, as infringement by a state of an exclusive franchise may constitute an invasion of the specific rights of the organization to which the franchise has been granted.[10]

Franchise Regulation

"THE power to grant a franchise carries with it the power to impose such reasonable regulations as to its exercise as will effectuate the purposes for which it is granted." [11] When a franchise is granted, there is an implied reservation of power to regulate on matters not specifically designated in the franchise contract.

An organization receiving a franchise is subject to regulation and control of the police power of either state or local authorities. Some state regulatory agencies have power and regulatory authority over public utility franchises, including those granted by municipalities.[12]

Since granting franchises by municipalities preceded the advent of state regulatory commissions, confusion has often arisen over what definite authority local governments now have in regard to regulating utilities operating within the city boundaries. Police powers, in so far as they can be separated from regulatory powers, have presumably not been altered. Regulatory powers, on the other hand, have been substantially modified even though the extent of modification is far from clear.

Rights of Parties upon Expiration of Franchises

FRANCHISES are of various durations and in some instances are of indefinite length. With virtually all public utility franchises, the assumption is, except with those having no expiration date, that a new one will be granted when the existing one expires. There is, however, no precedent that the new franchise will be identical to the old one. Consequently, the terms of the new franchise have to be agreed upon by both the grantor and the grantee. Each is free to disagree with the other with the result that the two parties might be unable to reach agreement on all phases of the new franchise.

This has happened in Morgantown, West Virginia, where the 40-year franchise held by the Chesapeake & Potomac Telephone Company of West Virginia expired June 13, 1956.[13]

One of the few definite points that can be made is that property owned by a franchise holder is his property after a franchise expires. This general rule applies to facilities located on property owned by the public such as city streets.[14]

IN the Morgantown case, the city and the company disagreed over both the duration of the proposed new franchise and the additional tax or "use fee" requested by the city to be paid by the company. The city proposed a 20-year franchise; the company suggested that it run for fifty years.

The city proposed to levy the additional tax or fee, but the company wished to continue paying the same fee ($123 per year) in addition to providing certain free telephone service for city offices as had been done under the old franchise. Which factor, the tax or duration of the franchise, was more important has not been clear. In neither case has there been any indication of agreement.

The city imposed a tax through an ordinance of the city council and also or-

dered the company to remove its telephone property from the streets. On both accounts, the company resorted to the courts with two cases eventually being decided by the supreme court of appeals of West Virginia, one in October, 1958,[15] and the other in March, 1959.[16]

THE first case followed an ordinance passed by the Morgantown city council in April, 1957, and amended the following July. The ordinance, in essence, required utility companies operating within the city and not having franchises to obtain annual permits and to pay certain "use fees" estimated after inventory of company property located in the city to be about $240,000 a year. The July amendment reduced the annual estimate to $40,000.

Before adoption of the ordinance, several company employees were arrested by city police when they climbed telephone poles in their regular maintenance work. The company assumed that the purpose of this action was to force it to agree to a franchise with terms advanced by the city.

Following adoption of the ordinance, the company requested and received an injunction from the local court prohibiting enforcement of the ordinance.

State Supreme Court Decision

THE West Virginia supreme court decided that a municipal government does not have the power to impose a "use fee" upon a "public utility telephone company, which is maintaining and operating its facilities upon and under the public streets of the city following the expiration of a previous franchise granted by the city." [17]

In substantiating the decision, the court ruled that the ordinance is invalid and that the city has never been granted authority to levy special taxes upon a person or corporation or to lease public streets and collect rental and that such authority can be granted by the state legislature only. Furthermore, no city can have such authority unless it is specifically granted by the legislature.

The court, likewise, took note that any taxes levied by a subdivision of the state must be uniform for all persons and property within the jurisdiction of the authority imposing the tax.[18]

Franchise Rights Unsettled

IN this decision, no indication was given as to what the city might do to prevent a utility from operating within its boundaries after a franchise expires or to pressure the company to enter a new franchise agreement. Consequently, the question of rights, privileges, duties, immunities, or liabilities existing between a utility and a city after the expiration of a franchise was left unsettled. The court left no doubt that actions of a municipality, with special reference to taxing powers, are absolutely limited to the specific powers granted by the state legislature. This has been confirmed in several cases in other states. As a consequence, a municipality has no implied powers and is unable to correct a matter that might have been covered by legislation if such legislative action had been requested and passed.

Therefore, cities are virtually limited in their actions to conditions which have occurred in the past followed by necessary legislation to cover similar circumstances in the future.

SOME confusion was created by the decision concerning the legal right of a municipal government to collect any form of revenue from a public utility that is not collected from other corporations operating within the city but make no special use of city streets. The court stated that a municipality [19]

> . . . may lawfully impose license taxes, reasonable in amount, upon a utility telephone company, which is maintaining and operating its facilities upon and under the public streets of the city following the expiration of a previous franchise, where the purpose and effect of such license taxes are to cover the approximate cost of supervision and other similar expenses incurred by the city in connection with the making of excavations, the erection of barriers, and like operations by such public utility.

Even though charges "reasonable in amount" might be levied against a public utility, determination of reasonableness seems to be left to the city and the company. Such assumption is hardly realistic to expect. Disputing parties are unlikely to arrive at reasonable amounts when the interest of each is in direct conflict with that of the other. The city wishes to receive all the revenue it can possibly receive, as its needs are great and ever becoming greater. The company, on the other hand, can be expected to prefer to pay as little as possible, since many other costs have risen, and such a tax or charge is an operating expense of the company and must be taken out of the company revenue, thereby either reducing its earnings or making a request for a rate increase more necessary. This is especially significant since municipalities are having great difficulty acquiring additional revenue as their costs and general responsibilities grow. Telephone companies have been forced to make numerous requests for rate increases within the past decade.

Therefore, the need for a formula, procedure, or other possible guide remains with none supplied by the court and no indication of how "reasonable" charges can be determined or collected. The public service commission of West Virginia decided that any tax levied by a city can be collected from customers residing in the city, but noted that the commission can neither grant nor restrict the authority of a city to tax.[20]

Decision of March, 1959

THE March, 1959, decision followed an appeal by the city of the local court decision relating to an order directing the telephone company to remove all of its property, including wires, poles, and other facilities from the streets of Morgantown.

Regulatory Authorities Delimit City Powers

THEREFORE, the fundamental point involved in this (March, 1959) decision is whether a city has the authority to compel a utility company to remove its facilities from its streets when such action would interrupt the utility service to residents of the city and surrounding territory. The court noted that the telephone company is engaged in both intrastate and interstate service and is subject to regulation by the public service commission of West Virginia and the Federal Communications Commission. Therefore, discontinuance of service by the company, which necessarily follows removal of all telephone property along city streets, could not be permitted independent of requirements by these regulatory agencies with regard to adequate telephone service.

It was further pointed out that upon creation of the public service commission in 1913, consent for placing poles and other facilities of public utilities along roads and streets must be obtained from the commission and not from courts and municipalities, as had been the practice before creation of the commission. The court stated that the public service commission was given "certain powers which were therefore conferred by statute upon municipalities and county courts."[21] In further clarification of this phase of the problem, the court quoted from the law creating the commission and specifying its duties as follows:[22]

> The commission shall have general supervision of all public utilities having authority under any charter or franchise of any city, town, or municipality, county court, or tribunal in lieu thereof, or otherwise, to lay down and maintain wires, pipes, conduits, ducts, or other fixtures in, over, or under streets, highways, or public places for the purpose of furnishing and distributing gas or for furnishing and transmitting electricity for light, heat, or power, or maintaining underground conduits, or ducts, for electrical conductors, or for telegraph or telephone purposes, and for the purpose of furnishing water, and shall have general supervision of oil and gas pipelines.

THE court referred to several previous cases in order to substantiate its contention that regulation and control of public utilities rest exclusively with the public service commission. This, however, is not to imply that a municipality is without power to regulate use of its streets; but it does mean that no municipality can enforce any part of an ordinance which is in conflict with the state Constitution or statutes related to utilities.[23] Consequently, the legislature limited the authority of cities over use of their streets by creation of the public service commission.

Many cases from various state and federal courts were cited as precedent that no utility can discontinue service without first obtaining the necessary approval from the state commission. Therefore, an order by a city council to cease rendering service cannot be enforced; in fact, a utility is prohibited from carrying out such an order unless and until the action is approved by the state commission.

When the power of a municipality to regulate use of its streets and to grant utility franchises conflicts with the right of a state to regulate utility services, the municipality must yield to the rights of the state. One case arising in another state and related to this basic principle, known as "City of Tulsa *v.* Southwestern Bell Teleph. Co.," was decided in 1935. In that decision, the court ruled that "maintenance of the system for telephone communication . . . manifestly is a matter of statewide concern, which should be controlled by state legislation rather than by local ordinance." [24] Later in the same case is found the statement that "the right to regulate and control public highways, streets, and alleys within municipalities is not granted to such municipalities but reserved to the state." [25]

To further support the contention of the telephone company that it could not legally carry out the city order to remove its facilities from the streets of Morgantown, the court referred to a 1912 decision of the United States Supreme Court known as the "City of Louisville, Kentucky *v.* Cumberland Teleph. & Teleg. Co." In this decision, the court made the following observation concerning telephone service:[26]

> In considering the duration of such a franchise it is necessary to consider that a telephone system cannot be operated without the use of poles, conduits, wires, and fixtures. These structures are permanent in their nature and require a large investment for their erection and construction. To say that the right to maintain these appliances was only a license, which could be revoked at will, would operate to nullify the charter itself, and thus defeat the state's purpose to secure a telephone system for its use. For, manifestly, no one would have been willing to incur the heavy expense of installing these necessary and costly fixtures if they were removable at will of the city, and the utility and value of the entire plant is thereby destroyed.

This particular case arose over a dispute in which the court interpreted the franchise held by the telephone company to be perpetual; and, therefore, the city could not force the company to remove its facilities. Apparently, there is no decision by the federal Supreme Court involving a case in which no question exists over the fact that the franchise has definitely expired leaving no franchise being in force.

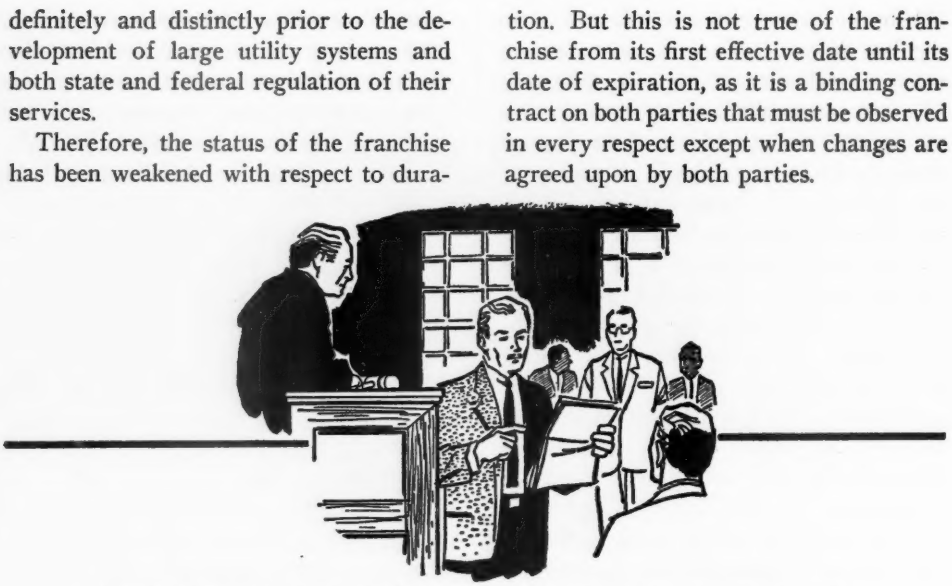
The West Virginia court, however, applied the same reasoning to the Morgantown case with the result that a franchise, to a limited extent, is perpetual even though there is a specific date of expiration, for the city is unable to stop the company from using streets and other city property even after there ceases to be any franchise agreement between the city and the company.

Summary and Conclusions

The franchise problem has arisen because of long-term changes in utility operations, especially the development of large interconnected systems and the advent of state regulation of utility services with the franchise itself remaining relatively unchanged in form and in content from the time it was first used. This was

definitely and distinctly prior to the development of large utility systems and both state and federal regulation of their services.

Therefore, the status of the franchise has been weakened with respect to duration. But this is not true of the franchise from its first effective date until its date of expiration, as it is a binding contract on both parties that must be observed in every respect except when changes are agreed upon by both parties.



WITH the March, 1959, decision of the West Virginia court, one phase of utility regulation which apparently has existed for about a half a century, but has not been clearly focused in previous court decisions, is that the utility franchise has lost much of its significance. The requirement to provide adequate service is solely the responsibility of state and federal regulatory agencies and no longer rests with municipal governments. Furthermore, the existence or expiration of a franchise alters this in no way, as the utility cannot discontinue the service even when ordered to do so by the city that owns the streets on which company facilities are located. Consequently, responsibility to provide adequate service transcends franchise obligations or need for a franchise, with the result that serious question exists as to whether a franchise is necessary after it expires.

In cases of perpetual franchises, this question does not arise as they are binding contracts of unlimited duration.

If there is some necessity to eventually renew an expired franchise, which is not clear from this decision, no indication is given as to how long a utility might operate without a franchise or what forces might be exerted to eventually bring about agreement between the city and the utility. As it now appears, renewal of a franchise is solely dependent upon the reasonableness of the officials of the city and of the company. Such universal reasonableness can hardly be expected with so many municipalities and utility companies involved.

The need for developing more effective procedures for franchise renewals or to modernize the entire relationship once existing through the franchise is becoming increasingly important. Since a large number of franchises were issued in the first two decades of this century, many

will expire within the next decade. As was pointed out in an editorial in the *Morgantown Post,* a daily newspaper of that city, state legislatures have failed to recognize that "although the regulation of public utilities has properly been vested in the public service commission and should remain there, those utilities . . . which use public ways for their physical facilities should in all fairness pay something for the privilege." [27] Utility executives do not deny this in principle.

However, means of observing a widely accepted principle can, at times, be very difficult to find. It appears to be quite clear that the remedy must come through legislation rather than through judicial decision, as apparently no basis exists on which judicial solutions to the problem can be based.

THIS is true, because the franchise concept developed from common law. But creation of regulatory agencies was through legislative action, and the legislative action takes precedence over the franchise whenever there is a conflict between the two.

Footnotes

[1] *"Corpus Juris Secondum."* The American Law Book Co. Brooklyn, New York. Vol. 37, p. 141 ff. (1943). (37 CJS Franchises, § 1, p. 145.)
[2] *Idem.*
[3] *Ibid.*, p. 146.
[4] *Ibid.*, p. 148.
[5] Trustees of Dartmouth College *v.* Woodward (1819) 4 Wheat 518.
[6] 37 CJS, *op. cit.*, p. 156.
[7] *Ibid.*, p. 158.
[8] *Ibid.*, p. 169.
[9] *Ibid.*, p. 170.
[10] *Ibid.*, p. 171.
[11] *Ibid.*, p. 174.
[12] *Idem.*
[13] "When a Utility Franchise Expires," by Thomas C. Campbell, Jr. PUBLIC UTILITIES FORTNIGHTLY, April 10, 1958, Vol. 61, No. 8, pp. 516, 522f.
[14] 37 CJS, *op. cit.*, p. 188.
[15] Chesapeake & P. Teleph. Co. of West Virginia *v.* City of Morgantown et al. Case No. 11000. October 21, 1958.
[16] Chesapeake & P. Teleph. Co. of West Virginia *v.* City of Morgantown, 28 PUR3d 567, 107 SE2d 489.
[17] Case No. 11000, *op. cit.*, p. 1.
[18] *Ibid.*, p. 10.
[19] *Ibid.*, p. 1.
[20] Re Chesapeake & P. Teleph. Co. of West Virginia (W Va 1957) 20 PUR3d 343.
[21] Case No. 11017, *op. cit.*, p. 7.
[22] *Ibid.*, p. 8.
[23] *Ibid.*, pp. 9f.
[24] (1935) 75 F2d 343, 353.
[25] *Ibid.*, p. 354.
[26] (1912) 224 US 649, 663.
[27] *Morgantown Post,* March 4, 1959.

"IT is a fact that the federal government has appropriated one-half billion dollars during this fiscal year for new highways; that the federal government will lay out $515 million for airways and airports, and that other millions will be spent to finance inland waterway improvements. Is this fair? Is this **true free enterprise?** Of course, it isn't. We say that the trucking, and airline, and inland barge carriers are no longer in diapers or even in knee pants. They may have needed a helping hand in the beginning, but not any more. They are mature. Let them pay, or at least contribute toward, their own rights of way, and equipment, and signaling devices as we do. Then let free enterprise flourish . . . and each form of transportation sell its services on the basis of true cost. In short, let user charges prevail industry-wide on an equal basis in the transportation industry. That's **free** enterprise!"

—JOSEPH A. FISHER,
President, Reading Company.

Why Not Plump for Regulation Itself?

There's a lot of pillow fighting in a rate case. Suppose management, after giving the public all the facts—a pillow—took a strong stand for the regulatory principle, told the public what it has done for our way of life—would there be less shadowboxing in the case?

By JAMES H. COLLINS*

LOUD talk from the Smiths' porch never alarms the neighbors who know them. But new neighbors are apt to think that violence threatens, and are half-minded to call the cops.

As one night last spring, when the Smiths were discussing where to go for vacation. Mr. Smith wears a hearing aid. Mrs. Smith has normal hearing, except for any viewpoint but her own. Mr. Smith wanted to vacation in the mountains, and Mrs. Smith at the seashore.

As it turned out, they are not taking any vacation at all this year. Some kind of money fell in, and they are combining this year's vacation with next year's, to go to Europe. The Smiths decide things that way.

The neighbors get much the same impression when a utility company applies for a higher rate before the state utility commission, and starts a rate case.

The neighbors now are the people of its community, its customers and the general public. They hear loud talk, and assume that management and commissioners are hereditary enemies. That a battle for supremacy is being fought, a grudge fight. In this corner the heavyweight utility company, easily pictured as big, merciless, and on that corner the state commission, battling on behalf of the underdog, the public.

These neighbors have never been told that a rate increase hearing, something only heard of since war's end, is pretty much like the Smiths, on their front porch. It is the way utility companies and state commissions settle their family affairs. There isn't a good punch in it, from start to finish. In fact, utility management likes regulation, would fight to keep it, would regard its abandonment as a catastrophe.

*Professional writer, resident in Washington, D. C. For additional note, see "Pages with the Editors."

Selling the Advantages of Regulation

IT may seem farfetched to suggest that rate problems might be eased if a utility company printed under its corporate title some such sentence as, "A Kansas corporation, regulated under the laws of this state." Or that much of the sound and fury of a rate case might be eliminated if the president of the company issued a statement telling the neighbors why his company is regulated, and why management likes it. Plumping for the principle of regulation ought to be a new kind of relations work for relations people, for which they would find abundant material in a recent issue of the **FORTNIGHTLY**, in which several authors went into the history of regulation, and why it has become distinctively the American way of conducting utility business. This material needs simplification, and readability for the average person.[1] The following is one version:

Utilities—Different Breed of Cats

A LONG time ago—in fact more than a century—it was discovered that Americans do business in two different ways.

First, by free competition, such as found at every gasoline station, where big and often little oil companies offer the motorist a wide choice of gasolines. If he doesn't like one, there are others. In catering to his trade, oil companies steadily improve their products. By research and advertising they increase their output, and lower prices.

Second, there are businesses that we have come to agree are monopolies. Our railroads were the first, because even before they spanned the continent, they ran to bigness, and crossed state lines, and had monopolistic aspects. Passengers and shippers had to pay what was charged, having no choice. So state governments began to fix fares and freight rates.

PRESENTLY, other kinds of monopolistic business appeared, with the telephone and electricity. At first there was competition, two telephone companies in one town, so the customer had a choice. But if he ran a business, he had to have both phones. The advantages of one company were manifest. To protect the public, state regulation was developed to determine rates that would be fair to everybody.

However, this idea of commission control was not established overnight. Complaints about rates were made by people in cities, and the city fathers tried to regulate them by local ordinances. A utility company might be doing business in the whole state, and in other states. So the complaints were taken to the state legislature, that attempted to correct conditions by passing new laws, which was a slow process. Utility companies were growing, had more customers, offered new types of service. The laws were often out of date before they were on the statute books.

"Let's throw these cases into the courts," said the lawmakers. "They have the facilities for investigating." But lawsuits were also slow, and expensive, and it

[1] "The Triumph of State Commission Regulation," by The Honorable Matt L. McWhorter; "Three Decades of Regulation of Public Utilities," by The Honorable H. Lester Hooker; "Improving the Regulatory Process," by The Honorable Oren Harris; "Thirty Years Agrowing," by Francis X. Welch. PUBLIC UTILITIES FORTNIGHTLY, July 2, 1959, Vol. 64, No. 1, pp. 1, 10, 19, and 60.

was discovered that courts did *not* have the facilities for investigating the engineering, and financial, and other factors of utility business.

FINALLY, the idea of special regulatory commissions, with technical staffs, was found to be the most businesslike way of dealing with utility company problems. Such commissions were established in different states at different times, and generally with different methods of controlling power, telephone, gas, streetcar, and other monopolistic companies. Different states had more, others fewer, such companies.

Numerous other kinds of business were placed under regulation, because monopolistic, such as freight haulers, water companies, public warehouses, toll roads and bridges.

But everywhere these commissions were charged with impartiality. They were required to safeguard not only the interests of customers in rates, and the quality of service rendered, but that of the general public, and of the utilities themselves. Certain standards of profit were maintained in setting rates, so the utilities could render satisfactory service, and grow with the community. Even the rate of profit was set with regard to stockholders, so that they would invest their money in utility companies, and receive dividends or interest in keeping with securities in other kinds of business.

Today, the principle of regulation is so firmly established, as the best way to run a utility company, that it would be hard to find utility managers who would want to go back to other days. State and federal commissions are as necessary as our courts.

The First Big Question—Value of Tools

IMAGINE a home owner, with a job of modernization to do, having to deal with the only carpenter in his neighborhood, instead of calling in several carpenters to get bids. This carpenter would have a monopoly, be protected in it by the state, and the state would regulate his price for the work.

At some time the state commissioners would have ordered the carpenter to attend a hearing, bringing a list of all his tools, with the dates he had bought them, and the prices he had paid.

"Now, you have quite a collection of saws listed," the commissioners would say. "When did you buy them? What did you pay? How much would such saws cost today? How do you figure their present value in setting your price for work?"

"Oh, them saws?" the carpenter would probably say.

"I don't remember prices, because I bought them at different times, some have been lost, or stolen. I wouldn't buy any such saws today, but get me modern power saws, and put them in a shop to do all my sawing, instead of having it done by muscle."

The commissioners would call in a hardware merchant or some other person capable of making an estimate. They would work out some kind of value for all the carpenter's tools, to serve in settling reasonable charges for his work.

Utility managers called to a rate hearing are also asked to put some kind of valuation on their generators, boilers, hydroelectric dams, pipelines, cables, poles—down to the very value of the post holes for the poles.

THIS is one of the big arguments in regulation, not so much the argument between commissioners and utility managers about how much plant is worth, as about the fairest basis for setting values.

Sometimes original cost has been ascertained, and depreciation calculated, while in other cases replacement costs are considered fairest. Utility managers would say, like the carpenter, "We wouldn't install such equipment today, but order the latest generators, with much greater capacity, and lower operating expenses."

All this quizzing and valuation have been put on a moving belt, with inflation. Equipment costs are steadily rising, with wages, taxes, and everything else. Utility companies have had to meet runaway demands for service. The commissioners figure out higher rates to meet the situation, and generally by the time a fair schedule of rates has been figured out for today, it is necessary to start all over, and figure out rates for tomorrow. The moving belt of inflation wrenches everything out of line.

IT is an unprecedented situation in utility regulation, and everybody, including commissioners, is seeking ways to make regulation more flexible. Some very good brains, and fair-minded, are at work on the problem.

AFTER the commissioners settle the value of the tools with which a gas or power or telephone company makes its living, they will take up other things affecting what it ought to charge for service.

For example, advertising. This opens up a debate in which outsiders may take part. Housewives do not know much about underground storage of gas, or what the latest steam turbines cost, but they do see advertising, and know it is expensive, and suspect that it is charged in their monthly bills.

So, regulators have worked a rough, unwritten rule for advertising. It is a legitimate expense as long as it leads people to use more gas and current, put more appliances in their homes, and also attract new customers. But if it is used to influence anybody otherwise, politicians, employees, lawmakers, that is bad. Deciding who is being influenced by utility advertising is something that would puzzle the crowned heads of Europe.

Public Now More Aware of Regulation

MOST people have heard of regulation only since the war, and rate cases in their own communities. Inflation has made it necessary to increase taxes, and postage rates, and many other expenses of living. More money for utility services is one of these problems of inflation, and utility customers become interested. But regulation has been going on for many years, unnoticed by the general public, and its everyday run of work is humdrum, and has little bearing on rates—indeed, utility rates were stable until after the war, and more likely to be reduced than raised.

In one of the larger states, the regulating commissions will handle thousands of cases yearly—in Illinois, for example, more than 7,000.

Utilities have to run their pipes and wires over rights of way granted by governments, or bought from property owners. Tough problems arise. Utility engineers survey a route that is most economical, or direct, and that indirectly affects utility rates.

But citizens object, and commissioners spend a great deal of time making right-of-way decisions.

IN one city the electricity and gas are supplied by the same company, and steam for heating, too. This company was putting it all on the same bill, which was modern accounting. Some customers objected to that, and the state commission went into details—and sustained the company, pointing out that separate billing gave some customers a chance to gouge the company.

A television company paid for the right to attach some of its equipment to a telephone company's poles. There was an argument over payment. It was taken before the commission, which decided that such an arrangement did not affect telephone rates, and so was a private deal. No jurisdiction!

Somebody had a bright idea in laying a gas pipeline—why not make a road along it? Only a dozen residents used this road, but they wanted it lighted, and asked the city to do it. The city maintained that lighting would be too expensive for so few people. The state commission ruled that the road had been built contrary to its specifications for such pipelines. Out of bounds!

The public hears of utility rates mostly when its own service is affected—as the housewife's monthly bill. But within the regulatory schedules a power company may have a dozen different rates, according to the amount of current used by different factories, transit companies, the city.

Such special rates are made to attract business. They create problems for the commissioners.

LATELY, a new kind of case has been developed for commission settlement—that of commuters who protest the abandonment of trains that they have been riding for years. The number of riders has dwindled, until the railroads cannot afford to haul them. The commuters are losing out all over.

Commissioners have a saying, that any citizen may start a case for their attention with a postal card. And anybody does.

Many of the postals register trivial complaints, settled with a letter. But this is a splendid field for snoopers. One case was anonymous, asking why the wife of a utility official should be drawing a salary for running an "information service" in her home. The commissioners ruled against it as a legitimate business expense.

Rate Case Is Poor Entertainment

THE interested citizen, told that the telephone or power company is asking for higher rates, may expect that there will be an exciting battle at the commission hearings and decide to attend. But he will hardly go more than one day. There are much better contests on television.

> TO THE utility people, a rate case is an ordeal. They go to great lengths in trying to explain things to different groups in the community. There are the housewives, who will find their monthly bills a little higher if an increase is granted. There are community leaders, whom people follow—it is important to brief them on the facts. There are newspaper editors, who may treat the case as a battle—conflict makes news. There are wage earners, and stockholders, and employees . . . the latter will be asked by friends why the company is trying to raise its rates, and in the case of utility managers, they will be asked to talk to meetings, and explain.

No truant schoolboy is ever dragged so unwillingly to school as the utility managers, but it is not to battle. If the interested citizen could see things from their angle, he would sympathize with them.

HERE, for years, the telephone or power company has been getting along on the rates allowed by the state commissioners. At times, rates have been lowered a little. But there is inflation, and the rate is not sufficient to maintain good service, or provide for the growth in public demand. Management has tried every kind of economy, tried to make the money do, but now it must just plainly have more money. This has never happened before in the company's history. The managers feel that they have failed somewhere. There will be interests accusing them of mismanagement. Hardly anybody will take the trouble to look into the commendable devices they have employed to try and keep their service up to high standards without asking for more money.

The interested citizen, with time on his hands, sitting at a rate hearing, will be bored to extinction. Day by day the commissioners dig for statistics: How much did this and that cost when it was new; what is it worth today; what would it cost to replace it? For a battle, there ought to be a big corporation in one corner, and a little fellow representing the public in the other corner. There ought to be a Perry Mason-Ham Burger trial, with Perry Mason finally proving that the real murderer was Ham Burger. Instead, there are only engineers, accountants, experts. There is not enough animosity between them to start anything.

As the saying goes, predictions are hazardous. But one can be made about rate cases—they will never make the Gillette Cavalcade of Sports.

The Umpire Cannot Pitch

IT is a persistent complaint of utility management that people will not take the trouble to understand the facts of a

rate case—why the company is asking for something in the community interest. Relations men marshal these facts, and release them, and the public glances at the tables and yawns.

"Ho-hum!"

If management were to take a modest poll of public opinion in its community, it would undoubtedly discover the reason for this indifference, which has been disclosed in larger polls, taken by professional opinion measurers.

THE interested citizen — even many housewives—ask how much their own utility bills are going to be increased. It generally averages out at 50 cents or $1 a month. That is not alarming, compared with taxes, food, rent. The public says, "Oh, well, there is a state commission to investigate that. Why worry?"

Ever since the first rate cases involving increases, there have been polls, and they roughly crystallize public opinion about as follows:

Three out of four persons think rates are reasonable. Two in a hundred think they are too high. Asked what they think a utility company ought to earn on its investment, hardly anybody says less than 6 per cent, and many say 10 per cent, and more.

ONE of the time-tested devices of the trial lawyer might be adapted to rate hearings. To relieve the jury of tedium, and win as much friendship as may be won from the judge, the attorney will produce a formidable document, an expert's opinion, an auditor's report, and riffle its pages to indicate its length and aridity. The judge eyes it apprehensively, as the attorney gives every sign of going through with it. However, the latter then asks the court's permission to enter it in the record, unread. There is a sigh of relief.

Suppose utility management, instead of laying its case before the public in statistics, were to strongly publicize the principle and method of regulation? The impartiality of the regulatory system, laid down by law, to strike a balance in utility affairs with strict regard for the public, customers, stockholders, and the utilities themselves, might be stressed, and perhaps illustrated by that state's commission decisions.

Certainly, a sigh of relief would go up.

HERBERT HOOVER once gave an excellent definition of regulatory impartiality. "The American system is a system of regulated business and compulsory competition," he said, commenting on the New Deal. "If we are to preserve democracy we must make government the umpire of business. If the New Dealers would go to a few baseball games they would learn that the umpire cannot play on the team and be an umpire. Bad business practices can be ruled off the field. But who is to umpire if the umpire is to pitch?

THE indifference of the public to rate cases is like the indifference of voters, hardly half of whom go to the polls in hotly contested elections. They are regularly scolded for this political apathy, and also for not taking the time to go into rate cases—generally presented from the company's viewpoint.

Some political observers regard this absenteeism as normal. The voter who does not cast his ballot sees little difference between parties and issues. The country and, probably, the town, seem to be going along very well. He reasons that his vote would not change things. He discounts campaign arguments. He plays golf on election day.

Let the Eagle Scream Locally

A GOOD question: Without regulation of privately owned utility companies, where would their service be in this country, compared with the government-owned and -operated utilities in most foreign lands?

As a member of the Virginia State Corporation Commission, H. Lester Hooker maintains that regulation should take into account not only utility prices and profits, but long-range community growth.

Government systems in other countries really began with a consideration of growth. It was argued that private enterprise could not raise the large capital needed for telephone service, power, and so on, that it could not take the risks involved in rendering service.

But private companies undertook these services in this country, with the result that the United States and Canada have more than half the world's telephones. This has not come about by chance, and it is good utility policy to keep the figures before the public.

There are amazing statistics of American utility service as contrasted with those in government-owned and -controlled systems. They are frequently printed as evidence of our standard of living, and should be part of utility management's stand for regulation. Let the eagle scream!

Hardly ten years ago, this country had 28 telephones per hundred people. Today it has 38. That is somewhere around one and a half phones per family. This growth has been financed entirely by private capital. Nearly half the capital raised by corporations to finance postwar growth has been obtained by utility companies, according to Mr. Hooker. Where under government ownership it would have come out of taxes, if it had come at all in adequate amount, in this country it has paid taxes, and paid dividends and interest to millions of people who own our utilities—and been accomplished under regulated rates of around 5 or 6 per cent.

In the past five years this country has added as much electric power capacity as the total in the seven next countries.

Gas utilities have not only expanded to the same extent, but have made startling technical advances. Private American research is bringing wasted natural gas from remote fields to great populations, as liquefied methane.

There is a superabundance of material along this line that ought to be kept before the public, as part of regulation. The eagle might scream locally. Mr. Hooker finds that in Virginia utility companies have shown from 350 per cent to more than 1,000 per cent of growth in thirty years, in customers, plant investments, and sales of service.

"Only the financially strong utility company can secure the money to adequately meet such heavy demands for expansion," he concludes. "One of the most important responsibilities of a regulatory commission is to realize that the commissions, as well as the utilities, must have a long-range plan."

Novel Regulatory Device from Russia

Our American way of doing business has lately been recommended to Europe by a French writer,[2] Father Bruckberger, a Dominican padre, who has lived in the United States, and maintains that we have had the only economic and social revolution in modern times that has achieved its goals. He advises Europeans to study our ways, and adapt them to their own economies.

That regulation is being found necessary even under the communistic ideology, is shown by another writer, Russian-born, but long a citizen of the United States.[3] Vladimir Grinioff wrote what he thought was a satire on Marxian business management, *"Tale of a Whistling Shrimp,"* and to his astonishment found later that most of it was coming true.

He tells of the tribulations of a Russian factory manager, who was always falling short of the production quotas set for him by distant commissars. One year he fell behind, and Siberia loomed in his dreams. But he succeeded in wangling an additional supply of copper, to make more goods. It happened that samovars were in short supply, selling for much more than his goods. So he made the copper up into samovars and sold them in the black market.

But next year he was behind the eight-ball again. He tried to get more copper. No luck. He applied for a loan, and was refused. Nothing seemed to avail.

But even the Marxist ideology has some flexibility.

The distant commissars afforded him a kind of relief that might be worth thinking about in our own regulatory problems.

They granted him a "small planned deficit."

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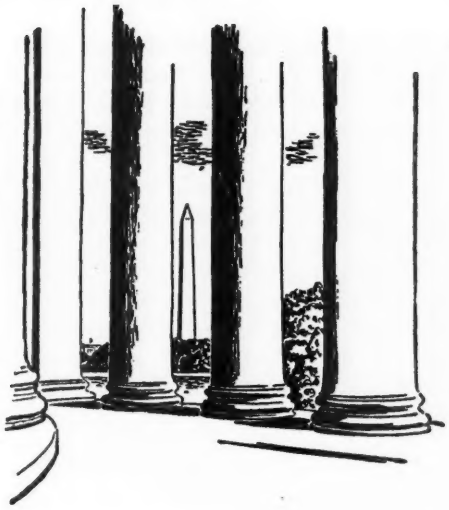
[2] *"Image of America,"* by R. L. Bruckberger (Viking).

[3] *"Tale of a Whistling Shrimp,"* by Vladimir B. Grinioff (Dutton). Also in paper as *"The Banker's Daughter."*

Washington and the Utilities



Interior Plans New Starts—1960

THE Eisenhower administration will ask Congress to approve "new starts" on several reclamation projects in the new fiscal year beginning next July 1st. Secretary of Interior Seaton said his department feels the government now is in a position to start some additional projects. He did not say how many new starts would be recommended in the new budget. The Secretary did not consider his statement a reversal of the administration's controversial "no new starts" policy which has been a principal feature of the past two federal budgets. "We have said all along that we needed a breathing spell in reclamation spending and we have had one," Seaton said. "Although the breathing spell was not as long as we would have liked, we now are in a position to start additional new projects."

Congress earlier this year overrode a presidential veto and passed a public works appropriation bill carrying funds for new starts, despite the fact that the budget had contained no money for this purpose. Seaton told reporters there has "never been a disagreement" between the administration and the Democratic-controlled Congress over the need for more water projects. He said it was only a difference as to timing. In a related development, Seaton revealed that he had written Senator Moss (Democrat, Utah) criticizing the Senator for allegedly saying that no new power starts have been undertaken in the Pacific Northwest since 1952. A Chicago newspaper quoted Moss as making the statement after the Senator returned from his recent visit to Russia. The Secretary said the fact was that seven new federal power projects, six nonfederal publicly owned projects, and five privately owned projects have been commenced in the past six years.

New FPC Case Designations

THE Federal Power Commission has announced a new system of assigning docket numbers to natural gas proceedings to indicate both the type of case and the fiscal year in which it was initiated. It will become effective January 1, 1960. The present system, which has been used since the Natural Gas Act was passed in 1938, is to assign consecutive numbers with the

prefix "G-" to all cases initiated under the Natural Gas Act. The first "G" case, G-100, was initiated July 6, 1938, and these numbers have now passed the 20,130 mark.

Under the new system, four different two-letter prefixes will be used to designate the type of case. The prefix will be followed by the last two digits of the fiscal year, then a dash, and finally the serial number for each type of case, beginning with "1" on January 1, 1960, and on each ensuing July 1st. On all natural gas cases other than rates or accounting, the prefix "CP" will be used for pipeline companies and "CI" for independent producers. The prefix "RP" will be used for pipelines, and "RI" for producers, on rate or accounting cases.

El Paso Merger Approved

IF the approval by an FPC examiner of the proposed merger of Pacific Northwest Pipeline Corporation and El Paso Natural Gas Company is sustained by the FPC, the Justice Department may consider again whether to attack the merger. El Paso already owns 99.8 per cent of Pacific's common stock and through the merger seeks a consolidation of all of the two companies' assets. Examiner Kelly last month recommended the merger because he concluded from the facts that such an action would further "the public convenience and necessity."

The FPC examiner said linking up of El Paso's expanding markets with Pacific Northwest's Canadian gas supplies would benefit customers over the entire system, especially those in California. Also, the examiner stated, the merger would stimulate development of the potentially productive Rocky Mountain area, strengthen the financial position of both companies, and possibly bring about lower rates because of more economic operations. The FPC had thirty days in which to initiate a review of the case. If none is begun in that time, the decision of the examiner will stand. Action on the suit by the Justice Department has been postponed pending a ruling on the case by the FPC.

Washington Gas Company Expansion in Virginia OK'd

VIRGINIA'S supreme court has upheld a state corporation commission decision allotting certain additional territory in northern Virginia to the Washington Gas Light Company for gas utility service.

Virginia Gas Distribution Corporation, which had petitioned the commission for some of the same territory, appealed from the state commission order on the ground that the territory should have been allotted to Virginia Gas. Justice C. Vernon Spratley, in writing the court's opinion, agreed with the state commission findings.

Washington Gas Light serves 370,000 gas customers, including 82,000 in Falls Church, Alexandria, Arlington county, and Fairfax county. Virginia Gas serves approximately 25,000 customers in 13 Virginia communities in areas along or adjacent to the pipelines of Atlantic Seaboard Corporation.

The state corporation commission had authorized the Washington Gas Light Company to extend its service to include Loudoun and Prince William counties in an order approved October 28, 1958. At the time, a company spokesman said the authority was sought as part of its long-range development program for the area beyond Chantilly.

When Virginia Gas appealed, the state supreme court, in March, 1959, suspended the state commission's order until it could review the case.

British Labor Backs Off from Nationalization

HUGH GAITSKELL asked the British Labor party at the recent meeting in Blackpool, England, to tiptoe away from its traditional socialist doctrine involving state ownership of means of production. The 53-year-old party leader called for revision of the party constitution written more than forty years ago and said: "We don't aim to nationalize every private firm or to create an endless series of state monopolies." Speaking for seventy minutes at a special party conference called to assess reasons for three straight election defeats, Mr. Gaitskell declared there was "no use waving the banners of a bygone age."

Mr. Gaitskell said the party executives would spend the next few months working out "fundamental principles of British democratic Socialism as we see them and as we feel them today—in 1959, not in 1918." He said he hoped these proposals would be forward looking and still seem relevant in 1970. He did not toss state ownership of industry completely overboard.

"I cannot agree that we have reached the frontier of public ownership as a whole," Mr. Gaitskell said. Yet he has been trying for years to move the Labor party away from nationalization which he called an ideological prison. But his speech last month was the furthest he ever has pushed his viewpoint.

There were shouts of protest from among the 3,000 delegates and alternates when he said nationalization—long the great totem of the party—should not be regarded as "the be-all and end-all of the movement." On the whole, Mr. Gaitskell seemed to get away with it. He apparently gave the party a new orientation without endangering his own position as leader. And as such, he is the man who will become Prime Minister if Labor ever wins another election.

ANEURIN BEVAN, one-time rebel leader but now Mr. Gaitskell's lieutenant, was scheduled to wind up the conference debate. If he refrains from attacking Mr. Gaitskell's thesis the Labor party will have turned a corner. If not, warfare between left and right wing undoubtedly will break out again.

Mr. Gaitskell analyzed in detail the reasons for Labor's defeat at the hands of Prime Minister Macmillan's Conservatives in the October 8th election. He said:

> There seems no doubt that the nationalization issue cost labor votes. Present nationalized industries, such as the railways and coal mines, were not popular with the public.

Mr. Gaitskell suggested socialist aims would be achieved by expanding the cooperative movement, using state money to buy stocks in private enterprises, and by setting up state-owned businesses to compete with existing private firms. "The public monopolies are better than the private ones—but all monopolies have their drawbacks," he said.

FCC Upheld on Regulatory Secrecy

THE Federal Communications Commission was within its rights in withdrawing some radio frequencies from nongovernment use in 1958 and turning them over to government use without prior notice. Such was the decision handed down by the United States circuit court of appeals of the District of Columbia last month. The FCC's action was based in part on classified information on government needs supplied by the former Office

of Defense Mobilization. The data were not made public. On the grounds that their rights should not have been abridged by information to which they did not have access, Bendix Aviation Corporation, Air Transport Asscociation, and Aeronautical Radio, Inc., appealed.

The FCC, under a U. S. circuit court of appeals ruling last January, turned over secret documents pertaining to military needs for radio channels for radio position finding. It stipulated that only the court's judges should be permitted to examine them.

In its recent ruling, the court said that no one should be permitted to look at the military documents, not even the judges themselves. It was the belief of the court that because the President had said the radio channels were needed for national defense, his word should be taken for it.

Judge Danaher ruled that "National trust and responsibility must be reposed somewhere and in this situation . . . they are centered in the President with all his vast power." Judges Washington and Burger concurred.

THE FCC usually grants full hearings and full court review to protesting groups upon any of its rulings for the determination of their reasonableness. None was granted in this case because of the singular circumstances. The FCC merely said it was reallocating the bands because ODM needed them, and refused to say why.

The U. S. circuit court of appeals did state, however, that Congress now had a problem to solve—that of determining how far the President's authority extends in assigning frequencies for government use when his ideas conflict with those of the FCC.

TVA Report

THE Tennessee Valley Authority's power operations produced revenues of $237.5 million for the fiscal year that ended June 30th, according to recently released financial statements. It reported a net income of $50.8 million.

TVA said its total revenues had been almost $4 million greater than those in the previous year but had been reduced by the economic recession, by some curtailment in the use of supplemental power by the Atomic Energy Commission, and by the fact that Memphis, until fiscal year 1959 a distributor of TVA power, had supplied part of its requirements from its own generating plant.

Excluding Memphis, revenues from sales to municipal and co-operative systems were $4.1 million above the year before, it said. Revenue from Memphis was $900,000 less than the previous year. Revenue from industrial sales was up $5.7 million, while revenue from sales to federal agencies was down by $4.9 million.

About 28.5 billion kilowatt-hours were sold to defense agencies of the federal government, including TVA's own chemical and fertilizer plants. The largest users of TVA power were the two installations of the Atomic Energy Commission at Oak Ridge, Tennessee, and Paducah, Kentucky.

At a nation-wide meeting of the Investment Bankers Association, held in Bal Harbour, Florida, early this month, self-financing by the TVA was termed "a serious defeat to the private enterprise system." The reference was to authority granted by Congress to the TVA to issue up to $750 million of revenue bonds.

The action was criticized in a report submitted to the annual convention of the IBA by its public utilities securities committee.

Telephone and Telegraph

Western Union Opens New York-San Francisco Telex Service

AUTOMATIC two-way direct customer-to-customer Telex service has been placed in operation by Western Union between New York city and San Francisco.

For direct written Telex communication with another subscriber, the user simply presses a "start" button and dials the desired number. The correct connection is verified instantly by pressing a "Who are you?" key and the originating machine automatically receives and prints the name and city of the distant subscriber. Telex requires no one to be at the number called, since the message can be sent with the assurance that it will be waiting when the distant correspondent returns to his office. The service permits subscribers to dial correspondents twenty-four hours a day for automatic two-way telegraph communications at special time distance rates.

In addition to dialing subscribers in other cities, Telex can also be used between local subscribers and to send and receive regular Western Union telegrams and cablegrams.

New York's Mayor Robert Wagner and Mayor George Christopher of San Francisco inaugurated the new service with an exchange of messages in which the two officials hailed coast-to-coast Telex service "as a major step in the progress of business and industry."

The opening of this service established San Francisco as another key Telex point and officially started service between San Francisco, Chicago, and New York, and between subscribers in those cities and all Telex points in Canada.

The speed of connection with distant subscribers results from the direct dialing feature between subscribers. Since answering a call at the distant subscriber's office is completely automatic, the connection is made instantaneously with completion of the dialing of the last digit of a subscriber's number. The Telex equipment supplied to each subscriber is a compact page-printing telegraph machine with a dial and automatic answer-back equipment.

JOSEPH D. JOHNSON, Western Union's metropolitan division general manager, announced that plans are under way to inaugurate the service at Los Angeles and to many other cities across the nation in 1960. He said that all initially available Telex facilities at San Francisco and Los

Angeles already have been sold out and rapid expansion of the centers, such as has already occurred at New York and Chicago, is anticipated.

At San Francisco, 100 leading businessmen attended ceremonies in the Sheraton Palace Hotel at which Western Union's Telex system, now linking New York, Chicago, and 26 Canadian cities, was placed in operation.

First-day subscribers at San Francisco included a number of leading West coast firms, which flashed messages to correspondents in other cities.

Radio-optical Tracking Station

A RADIO-OPTICAL space tracking station has been unveiled by the General Electric Company at Schenectady, New York.

The new station is the first combination radio-optical telescope and it will permit scientists to simultaneously see and hear objects far out in space. The optical telescope will provide visual tracking while the radiotelescope will follow the missile by the radio signals the missile transmits.

The observatory was entirely built with General Electric Company funds and it probably represents the first such station established by a company as part of its commercial operations.

The new facility is sure to prove of great value as the United States steps up its missile and satellite programs.

FCC Clears Way for Mail Facsimile Tests

THE Federal Communications Commission has granted permission to the American Telephone and Telegraph Company to file, on twenty-four hours' notice, tariff rates to test the Post Office's closed-circuit mail facsimile.

The test facsimile circuit will connect Washington with Detroit and Battle Creek, Michigan. However, the Post Office has declined to state just when the system will be put into operation.

It is expected that two channels will be involved in the experiments. One of these will be used to send the facsimile and the other will be used to observe its reception by video. Coaxial cable or microwaves will be used and transmissions will take place in both directions.

American Telephone and Telegraph will supply transmission facilities in the experiment. However, the International Telephone & Telegraph Company will design and test the bulk of the terminal parts of the system.

New York City to Complete D-D-D by February 7th

A FIVE-YEAR, $40 million program to bring direct distance dialing to more than 4.3 million telephones in New York city will be completed February 7, 1960, the New York Telephone Company has announced.

This will mean that virtually all customers in New York city and Nassau and Westchester counties will be able to dial their own station-to-station calls to any of more than 53 million telephones across the country and in Canada.

So far this year, the new service has gone into effect for more than 1 million customers in New York city and Nassau and Westchester counties. Before the end of 1959, it will be provided for almost 787,000 more users in Queens, Brooklyn, and Nassau county.

On February 7, 1960, it will go into effect for about 800,000 customers in the

Bronx, northern Manhattan, and White Plains and Yonkers who do not already have it. Telephone company personnel have started instructing these customers in how to dial distant places direct. The instruction will continue until next February 7th.

Mount Vernon, New Rochelle, and Pelham customers who do not have the service will get it within a few weeks after those in White Plains and Yonkers. City Island—the last community in New York city to be served by manual equipment—will have direct distance dialing early next summer at the same time as its service is changed to dial. Customers in Oyster Bay and Bayville, Long Island —the last manual central offices in Nassau county—will be able to dial distant places direct next summer.

THE Bronx, Manhattan, and Westchester customers who will be receiving the new service in February, or shortly thereafter, will be served on the calls they dial to distant points by a formidable array of equipment on the fifth floor of the eight-story Bronx headquarters building at 1775 Grand Concourse.

This is the vital nerve center in the vast communications system that will transport their voices across the country in about the same time it takes a track star to run the 100-yard dash.

RCA Chairman Predicts 100,000 TV Students

DAVID SARNOFF, chairman of the Radio Corporation of America, has forecast that a nation-wide educational television network will eventually reach as many as 100,000 students. Mr. Sarnoff made this prediction while addressing the Honorary Directors Association of Rockhurst College in Kansas City, Missouri.

Mr. Sarnoff stated that the basis for such a network exists in the 43 noncommercial educational stations now in operation. Such an educational TV network would enable numerous persons to receive college degrees who, at this time, are unable to attend institutions of higher learning.

In his speech Mr. Sarnoff noted that such a system would enable the ablest teachers to receive better pay, while they would be providing superior instruction for more students—in less time and at lower costs.

Miniature Radio Implanted In Dog

SCIENTISTS have announced that they have implanted a tiny radio inside a dog's body and connected it to the animal's heart. The project was outlined before a five-day meeting of the American Rocket Society by four scientists representing the University of Southern California and Spacelabs, Inc.

The tiny two-ounce transmitter is powered by a battery which will supply power for about four hours. The transmitter could be designed to send signals relating to the animal's nervous system, blood pressure, brain waves, temperature, breathing, etc. Scientists suggest that such a radio-equipped animal might be shot into orbit before man is sent up in the first Mercury flights. It has also been suggested that the first astronaut should take along such an animal so that a constant check could be maintained on radiation damage, air pollution, and other factors which might imperil the first man to be shot into the unknown world of outer space.

Financial News and Comment

By OWEN ELY

Latest Ideas for Obtaining Electricity Directly from Heat

FINANCIAL interests have been intrigued by one recent long-range proposal in the electric generation field. Ten leading utility companies have joined with Avco Corporation to develop a revolutionary new idea for producing power. It is known as magnetohydrodynamics (MHD for short) and will produce electricity by interactions between a magnetic field and a superheated, ionized gas. Avco became interested in this work in connection with space exploration but later broadened the project to include commercial production of power.

Philip Sporn of American Electric Power is interested in the Avco project and American Electric Power Service Corporation, together with three operating subsidiaries in the system, have joined in the development work. Also co-operating are Central Illinois Light, Dayton Power & Light, Illinois Power, Indianapolis Power & Light, Kansas City Power & Light, Louisville Gas & Electric, and Union Electric.

In a full page ad in *The New York Times* Avco stated that a small laboratory device is operating experimentally at the Avco-Everett Research Laboratory, where it has successfully lighted a bank of 228 50-watt bulbs. The device has produced over 10 kilowatt-hours output and suggests a first step towards generating commercial electric power without coal or hydro.

General Electric, a few days earlier, had made a similar announcement regarding MHD (summarized in *The New York Times,* October 31st). MHD utilizes a discovery made by Faraday over a hundred years ago that an ionized gas moving between the poles of a magnet generates an electric current. In the GE apparatus air is heated to 5,000 degrees and thus becomes a plasma, some electrons being stripped from the atoms of oxygen and nitrogen. The jet of hot air is directed into a hollow block of quartz held between the poles of a magnet; there the magnetic forces pull the electrons into the sides of

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the quartz and they then flow into an attached wire, creating a regular electric current.

STILL another device is under study by International Telephone & Telegraph Corporation, a ferro-electric converter that can produce high-voltage electricity directly from heat. It was described at a meeting of the American Rocket Society in Washington. The device is represented capable of supplying both direct and alternating current at high voltages—unlike the solar battery which produces only direct current at low voltages. The new energy converter uses the special property of ceramic materials called ferro-electrics. According to IT&T an output of over 1,000 volts has been obtained directly from a single converter element the size of a dime; by arranging elements in series, outputs of 1 million volts were said to be theoretically possible. It is not clear, however, whether this device may have a potential place in generating plants or whether it would merely prove useful in space vehicles.

New possibilities seem to be coming thick and fast in the electric power field. Curtis Wright has announced the development of a lightweight internal combustion engine with only two moving parts which draws a mixture of gasoline and air from a carburetor; it claimed that an engine half the size of a piston engine can give twice the power and is cheaper to operate.

Here again the primary use is for aircraft, but the idea remains that they could also perhaps be used for small commercial power plants. Roy T. Hurley of Curtis Wright has stated "you can stack them up like pancakes" to drive a single shaft and obtain larger amounts of usable power. The company is reported developing units with 100 to 700 horsepower, but could build much larger ones. The life of the rotary engine is expected to be longer than those of piston and turbine engines because of its simplicity.

Pressurized Water Reactor Gaining?

THE project to produce "competitive" nuclear power now seems centered mainly in General Electric's boiling water reactor and Westinghouse Electric's pressurized water reactor. GE and Commonwealth Edison have somewhat modified their earlier suggestions that the Dresden reactor (which recently went critical and is expected to be in commercial operation next June) might prove competitive with coal-burning plants in that area; a GE official recently stated (see *P. U. R. Letter* of October 23rd) that Dresden would become competitive by 1966 on the basis of $37 million capitalized costs, but not including the cost of nuclear fuel.

Atomic Energy Commission officials seem to believe that the pressurized water reactor has now been developed to the point where it is closer to competitive costs than the boiling water reactor. Frank K. Pittman, director of the AEC Reactor Development Division, in an address before the Atomic Industrial Forum recently, asserted that an expenditure of only about $20 million for research and development might suffice to make the pressurized water reactor competitive in high fuel cost areas such as New England. (He estimated atomic cost at 7.81 mills with a large reactor.) On the other hand, he felt that an expenditure of $45 million and perhaps five years' time would be required to make the boiling water reactor competitive. AEC Chairman McCone made the encouraging statement that estimated costs of nuclear power had been sharply reduced during the past year.

MEANWHILE, however, a third contender has appeared, Martin Company's Nuclear Division, which is developing LFBR—a "liquid fluidized bed reactor." It is claimed that "LFBR promises to produce power at a fuel cost comparable to that of conventional fuels anywhere in the world," but fabrication problems remain to be solved before a working unit can be built. This novel design would eliminate control rods and other complex actuating equipment, thus reducing fuel fabrication costs and making it easier to recover valuable fissionable material from a reactor core after use. The chain reaction would be initiated and turned off merely by regulating the flow of liquid in a large upright cylinder—this flow would govern the amount of space between the fuel pellets and thus govern the chain reaction.

The AEC is now paying greater attention to thorium as a breeder of uranium 233 (which is as fissionable as U-235). Thorium is more abundant than uranium but usable concentrations are limited, according to *Time*. The AEC is reported hopeful that this breeding factor may prove the key to cheap nuclear power, but in the absence of facts and cost figures it is difficult to comment. There seems to be an abundance of uranium anyway, according to Canadian press reports, and that country is wondering whether it should go into the business of producing enriched uranium—in which the U. S. now has a virtual monopoly.

Share Earnings Should Benefit When Amortization of 100.5 Runs Out

AN "anchor to windward" in the share earnings of many electric utility companies is the fact that the 15-year periods of amortizing Account 100.5 (acquisition adjustments) are now beginning to run out.

Thus, one of the largest amortization items, that of Minnesota Power & Light which reduces share earnings by 37 cents, should run out at the end of this year. Similar bookkeeping charges for other utility companies may also disappear as a deduction from earnings over the next two or three years.

About 37 per cent of the larger utilities have these charges, as an aftermath of the program for "purification" of holding company systems by the SEC in the 1940's, which aimed at reducing plant cost to "cost when first devoted to public service." Many of the charges are small in terms

CURRENT YIELD YARDSTICKS
(Standard & Poor's Indexes)

	Nov. 25, 1959	*1958-59 Range*		*1957 Range*	
		High	*Low*	*High*	*Low*
Utility Bonds—A1+	4.60%	4.70%	—3.58%	4.38%	—3.70%
—A1	4.65	4.76	—3.61	4.41	—3.73
—A	4.77	4.94	—3.85	4.70	—3.96
—B1+	5.09	5.19	—4.20	5.21	—4.21
Preferred Stocks*	4.80	4.87	—4.26	4.86	—4.42
Utility Common Stocks	3.99	4.98	—3.71	5.44	—4.73
Spread—Common Stocks *versus* A1+ Bonds	—0.61	+0.28	+0.13	+1.06	+1.03

*Twelve industrial and two utility issues (high-grade).

of share earnings; following are the companies which charged the equivalent of 10 cents a share or more for this bookkeeping item in 1958:

Central Illinois Light	18¢
Central Illinois Public Service	11
Connecticut Light & Power	20
Delaware Power & Light	14
General Public Utilities	14
Iowa Public Service	10
Kentucky Utilities	13
Minnesota Power & Light	37
Montana Power	13
Ohio Edison	15
Southern Company	13
Southern Indiana Gas & Electric	11

Construction of New Generating Capacity to Slow Down

THE October, 1959, electric power survey (the twenty-sixth semiannual survey, conducted by a committee of the Edison Electric Institute) is now available, and future projections are approximately the same as the forecasts made last April. In 1958-59 yearly additions to capacity were at the rate of 10 per cent, but with the margin of capacity up to 28 per cent at the end of this year future additions will be at the rate of 6-7 per cent a year, on which basis the margin will decline from 28 per cent to 25 per cent. In other words, the increase in equipment will not equal the increase in peak load during 1960-62, which is estimated at 7-8 per cent. Details by years are as shown in table below, using winter peaks and median hydro conditions. (By 1962 it is estimated that with the increase in air conditioning summer load will equal the winter.)

The annual load factor in 1962 is estimated at 65.3 per cent compared with 64.5 per cent in 1958 and 66.9 per cent in 1957.

ESTIMATED additions to capability during the five years 1958-62, inclusive, approximate 48 million kilowatts. Orders have already been placed for some 44 million kilowatts of generating equipment, and presumably additional orders (for 1961-62 delivery) will be forthcoming during 1960. The amounts by years are as follows in millions of kilowatts:

Year	*Steam*	*Hydro*	*Total*
1959	12.0	1.6	13.6
1960	10.0	1.9	11.9
1961	7.3	2.9	10.2
1962	6.9	1.4	8.3
1963*	3.4	.6	4.0
Total	39.6	8.4	48.0

*Including later years.

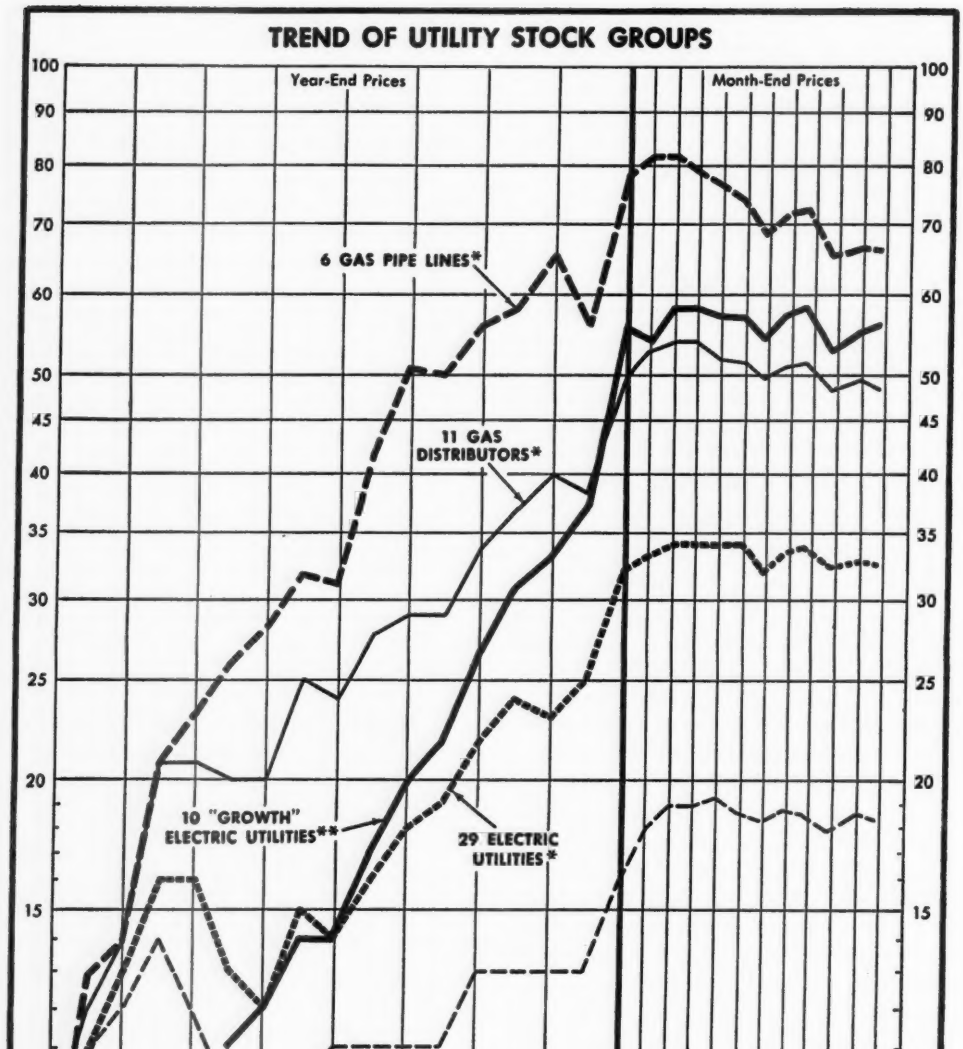
Of the scheduled additions during the 1959-63 years, the total of 48 million kilowatts is made up as follows by character of ownership:

	Steam	*Hydro*	*Total*
Investor-owned	33.4	1.3	34.7
Public Power-Federal	3.1	2.8	5.9
Nonfederal	3.1	4.3	7.4
Total	39.6	8.4	48.0

THE average size of steam units was 117,000 kilowatts in 1959, and the size will increase each year up to an aver-

(Millions of Kilowatts)

	1958	*1959*	*1960*	*1961*	*1962*
Capabilities Scheduled	144	159	170	181	192
Annual Increase %	10	10	7	6	6
Peak Load	113	125	134	144	153
Annual Increase %	6	10	8	7	7
Gross Margin %	27	28	27	26	25


TREND OF UTILITY STOCK GROUPS
Year-End Prices
Month-End Prices
6 GAS PIPE LINES*
11 GAS DISTRIBUTORS*
10 "GROWTH" ELECTRIC UTILITIES**
29 ELECTRIC UTILITIES*
3 TELEPHONE*
100
90
80
70
60
50
45
40
35
30
25
20
15
10
9
8
7
1942 '43 '44 '45 '46 '47 '48 '49 '50 '51 '52 '53 '54 '55 '56 '57 '58 J F M A M J J A S O N D
1959
*Standard & Poor's Index
**PUF Index

age of 201,000 for 1963, indicating very clearly the trend toward installation of larger units with greater economies both in construction and operating costs. To a large extent the building of larger units is facilitated by the growing practice for a group of utilities within one state or area to "club together" to build larger plants at less frequent intervals, on a power pool basis.

The average size of hydro units shows less variation, increasing from 50,000 kilowatts in 1959 to 86,000 in 1961, but declining to 69,000 in 1963. There is, of course, little or no increase of efficiency obtained in building bigger hydro units.

THE survey includes a tabulation of atomic power projects of 4,000 kilowatts and upwards. There are already in operation four units with a capacity of 78,000 kilowatts (the Duquesne plant and three small ones). There are under construction, designed, or under contract negotiations, 16 plants with a total capacity of 1,112,000 kilowatts which are scheduled for operation during 1960-63. Two additional plants scheduled for the mid-1960's would have total capacity of 400,000 kilowatts, bringing the grand total to 1,590,000 kilowatts or one per cent of our present capacity of steam and hydro.

"Powercasting" by Westinghouse

WESTINGHOUSE ELECTRIC has just completed a two-year study for Public Service Electric & Gas, planning the company's future growth and the facilities that will be required to take care of it. Now Westinghouse is offering the use of its techniques and of its computer lab to other utility companies which may wish to make similar studies, which can be worked out in shorter time now that the procedure has been developed.

Most utility forecasting is now done separately for different divisions of the plant—generation, transmission, distribution, etc. Says *Business Week:*

> Powercasting claims to be more sophisticated than present planning methods in its use of computers, thanks to its combination of mathematics and human participation gaming, and in its mathematics, where it uses a greater number of advanced techniques. It has a theoretical advantage in forecasting

WALL STREET BROCHURES ON THE UTILITY INDUSTRY

		No. of Pages	*Month Issued*
Electric Utilities (Tabulation)	Jas. H. Oliphant & Co.	6	Oct.
Electric & Gas Utilities (Tabulation)	The First Boston Corp.	12	June
Growth of Output & Earnings Is Continuing	Goodbody & Co.	2	July
Accelerated Depreciation	Goodbody & Co.	12	June
Natural Gas Companies (Tabulation)	Shearson, Hammill & Co.	7	Aug.
Values in Elec. Util. Common Stocks	Goodbody & Co.	10	Sept.
Public Utility Common Stocks	R. W. Pressprich & Co.	7	June
Utility Industry	F. P. Ristine & Co.	4	Sept.
Public Utilities Bulletin*	Eastman Dillon, Union Securities & Co.	10	Oct.
Electric Utility Companies—Comparative Data by Regional Groupings	Carl M. Loeb, Rhoades & Co.	16	July
Tax-free Utility Dividends	Carl M. Loeb, Rhoades & Co.	4	Nov.

*Issued every two weeks, contains new stories on a number of utilities.

for an entire system. This makes it better able to allow for the effects of advances in one segment on events in another segment (which may be extremely important in a system as elaborate as a utility).

The advantages claimed for the system are that it makes possible the comparison of results which flow from numerous detailed alternatives, and that it can be readily corrected and updated on the basis of actual experience. It is estimated that the utility industry will spend some $150 billion over the next twenty years, and efficient planning is necessary to obtain the best results for this huge expenditure.

Backs Federal Aid

THE American Municipal Association has endorsed a proposal for federal aid to commuter railroads. The organization, which is reported to represent 13,000 municipalities, also got in a word for the nation's airlines, urging Congress to revise the Federal Airport Act to provide $100 million each year for five years plus an additional $75 million for discretionary use over the five-year period for aid to airports.

A proposal for "prompt legislative implementation" of the plea for commuter aid will be drafted and sent to mayors and railroads for their endorsement. It will then be presented to Congress early in its next session. Under the proposal, Congress will be asked to establish a national policy for a balanced and co-ordinated transportation system and, along with state and local governments, to develop "rational tax policies" for the railroads.

The four-point program also envisions availability of long-term, low-interest federal loans, where necessary, "to municipalities or publicly constituted bodies for new commuter equipment and improved facilities."

FINANCIAL DATA ON ELECTRIC UTILITY STOCKS

Annual Rev. (Mill.)			*11/25/59 Price About*	*Dividend Rate*	*Approx. Yield*	*Recent Share Earns.*	*% Increase*	*Aver. Incr. In Sh. Earns. 1953-58*	*Price-Earn. Ratio*	*Div. Payout*	*Approx. Common Stock Equity*
$297	S	American Elec. Power	46	$1.80	3.9%	$2.37Au	5%	7%	19.4	76%	36%
57	O	Arizona Pub. Serv.	33	1.20	3.6	*1.81Se	D5	9	*18.2	66	28
12	O	Arkansas Mo. Power	20	1.00m	5.0	1.34Se	—	2	14.9	75	32
36	S	Atlantic City Elec.	29	1.10	3.8	1.43Se	15	8	20.3	77	33
153	S	Baltimore Gas & Elec.	25	1.00	4.0	1.41Se	23	7	17.7	71	41
7	O	Bangor Hydro-Elec.	39	2.00	5.1	3.05Se	35	5	12.8	66	33
6	O	Black Hills P. & L.	29	1.44	5.0	2.39Jy	6	4	12.1	60	32
109	S	Boston Edison	60	3.00	5.0	3.64Je	NC	4	16.5	82	43
27	A	Calif. Elec. Power	19	.80	4.2	*1.16Se	9	5	*16.4	69	35
23	O	Calif. Oreg. Power	34	1.60	4.7	1.93My	1	3	17.6	83	37
9	O	Calif. Pac. Util.	37	1.80	4.9	2.59Se**	14	4	14.3	69	31
70	S	Carolina P. & L.	35	1.32	3.8	2.10Oc	5	5	16.4	62	42
32	S	Cent. Hudson G. & E.	20	.80	4.0	*1.39Se	5	5	*14.4	58	36
23	O	Cent. Ill. E. & G.	33	1.44	4.4	2.15Se	7	11	15.3	67	43
39	S	Cent. Ill. Light	33	1.52	4.6	2.25Oc	10	8	14.7	68	33
55	S	Cent. Ill. P. S.	44	1.76	4.0	2.69Se	5	13	16.4	65	35
17	O	Cent. Louisiana Elec.	45	1.80	4.0	2.09Se	D8	7	21.5	86	30
39	O	Cent. Maine Power	24	1.40	5.8	*1.66Oc	D5	4	*16.3	86	33
147	S	Cent. & South West	59	1.80	3.1	2.76Se	10	8	21.4	65	40
12	O	Cent. Vermont P. S.	19	1.08	5.7	*1.35Se	5	9	*14.1	80	35
128	S	Cincinnati G. & E.	32	1.50	4.7	1.85Se	D4	3	17.3	80	43
8	O	Citizens Util. "B"†	13	.53	4.1	.69Se	6	6	18.8	77	48
119	S	Cleve. Elec. Illum.	47	1.80	3.8	2.93Se	14	5	16.0	61	45

Annual Rev. (Mill.)		(Continued)	11/25/59 Price About	Dividend Rate	Approx. Yield	Recent Share Earns.	% Increase	Aver. Incr. In Sh. Earns. 1953-58	Price-Earn. Ratio	Div. Payout	Approx. Common Stock Equity
6	O	Colo.-Cent. Power	22	.75	3.4	1.16Se	18	6	19.0	65	39
46	S	Columbus & S. O. E.	40	1.60	4.0	2.29Se	11	—	17.5	70	30
405	S	Commonwealth Ed.	59	2.00h	5.7h	3.64Se	20	7	16.2	55	43
14	A	Community Pub. Serv.	23	1.00	4.3	1.43Se	7	5	16.1	70	46
78	O	Conn. Lt. & Pr.	23	1.10	4.8	*1.34Oc	D3	5	*17.2	82	39
582	S	Consol. Edison	60	2.80	4.7	*3.87Se	7	5	*15.5	72	36
228	S	Consumers Power	56	2.60	4.6	3.57Se	11	1	15.7	73	38
83	S	Dayton P. & L.	52	2.40	4.6	3.23Je	D4	4	16.1	74	40
50	S	Delaware P. & L.	65	2.10	3.2	3.18Se	13	9	20.4	66	33
246	S	Detroit Edison	43	2.00	4.7	2.38Oc	11	3	18.1	84	47
145	A	Duke Power	46	1.40i	3.0	2.15Se	4	9	21.4	65	46
99	S	Duquesne Light	24	1.10	4.6	*1.38Se	D3	5	*17.4	80	34
33	O	East. Util. Assoc.	41	2.20	5.4	3.03Se	14	3	13.5	73	34
3	O	Edison Sault Elec.	19	.90	4.7	1.43Se	27	8	13.3	63	34
16	O	El Paso Elec.	34	1.16	3.4	1.60Se	3	8	21.3	73	37
12	S	Empire Dist. Elec.	28	1.36	4.9	1.78Se	15	3	15.7	76	33
57	S	Florida Power Corp.	29	.80	3.1	1.07Se	D12	15	27.1	75	35
145	S	Florida P. & L.	49	.88	1.8	1.91Se	11	18	25.6	46	42
4	O	Florida Pub. Utils.	21	.72	3.4	1.22Se	3	3	17.2	59	31
213	S	General Pub. Util.	24	1.12	4.7	*1.62Se	4	5	*14.8	69	40
7	O	Green Mt. Power	19	1.10	5.8	1.26Se	D3	10	15.0	87	37
70	S	Gulf States Util.	29	.90	3.1	1.31Se	9	7	22.1	69	32
51	A	Hartford Elec.	62	3.00	4.8	*3.81Se	—	2	*16.3	79	40
25	O	Hawaiian Elec.	55	2.50	4.5	3.26Se	11	6	16.9	80	34
94	S	Houston L. & P.	65	1.60	2.4	2.99Oc	—	8	21.7	54	41
30	S	Idaho Power	48	1.70	3.5	2.16Se	D18	9	22.2	79	33
92	S	Illinois Power	41	1.50	3.7	2.56Se	25	7	16.4	59	37
49	S	Indianapolis P. & L.	40	1.70	4.2	2.41Se	14	7	16.6	71	35
31	S	Interstate Power	18	.90	5.0	1.19Se	10	4	15.1	76	32
37	S	Iowa Elec. L. & P.	33	1.60	4.8	2.33Oc	12	5	14.2	69	40
44	S	Iowa-Ill. G. & E.	37	1.80c	4.9	2.48Se	6	—	14.9	72	43
41	S	Iowa P. & L.	33	1.60	4.8	2.01Se	4	1	16.4	80	34
35	O	Iowa Pub. Ser.	20	.80	4.0	1.24Se	10	3	16.1	65	32
15	O	Iowa Southern Util.	28	1.36	4.9	2.18Se	10	4	12.8	62	40
61	S	Kansas City P. & L.	48	2.20	4.6	3.01Se	D1	5	15.9	73	38
33	S	Kansas G. & E.	47	1.64	3.5	2.73Oc	NC	8	17.2	60	31
50	S	Kansas P. & L.	33	1.36	4.1	2.30Se	15	9	14.3	59	34
43	O	Kentucky Util.	36	1.60	4.4	2.76Se	17	7	13.0	58	40
7	O	Lake Superior D. P.	23	1.20	5.2	1.68Se	7	2	13.7	71	41
122	S	Long Island Ltg.	33	1.30	4.0	*1.99	3	6	*16.6	65	34
61	S	Louisville G. & E.	44	1.30	3.0	2.43Se	10	6	18.1	53	42
11	O	Madison G. & E.	47	1.80	3.8	4.03Se	16	2	11.7	45	45
5	A	Maine Pub. Serv.	21	1.20	5.7	1.46Se	D1	6	14.4	82	40
7	O	Michigan G. & E.	78	1.70j	5.2	5.67Se	26	9	13.8	30	37
183	S	Middle South Util.	49	1.90	3.9	2.77Oc	6	5	17.7	69	39
30	S	Minn. P. & L.	32	1.60	5.0	2.21Oc	D3	3	14.5	72	33
3	O	Miss. Valley P. S.	30	1.40	4.7	2.34Se	12	5	12.8	60	33
15	S	Missouri P. S.	18	.72f	6.0	.95Oc	D1	3	18.9	76	30
7	O	Missouri Util.	25	1.36	5.4	1.71Se	4	—	14.6	80	30
44	S	Montana Power	27	.80	3.0	*1.40Se	8	9	*19.3	57	39
167	S	New England Elec.	20	1.08	5.4	1.29Se	7	1	15.5	84	36
46	O	New England G. & E.	23	1.10	4.8	1.72Se	14	6	13.4	64	41
98	S	N. Y. State E. & G.	27	1.20	4.4	*1.94Oc	9	9	*13.9	62	38
264	S	Niagara Mohawk Pr.	36	1.80	5.0	*2.03Se	D5	1	*17.7	89	28
92	O	Northern Ind. P. S.	53	2.00	3.8	3.05Se	10	3	17.4	66	36
155	S	Northern Sts. Power	23	1.10	4.8	1.36Se	5	3	16.9	81	36
11	O	Northwestern P. S.	21	1.10	5.2	1.52Se	6	2	13.8	72	32
138	S	Ohio Edison	61	2.64	4.3	3.85Se	8	3	15.8	69	40
54	S	Oklahoma G. & E.	32	1.00	3.1	1.49Oc	3	9	21.5	67	31
26	O	Orange & Rockland Utils.	26	.90	3.5	*1.29De**	3	16	*20.2	70	27
17	O	Otter Tail Power	32	1.60	5.0	2.61Se	18	1	12.3	61	30
535	S	Pacific G. & E.	62	2.60	4.2	3.75Se	3	6	16.5	67	34
52	O	Pacific P. & L.	36	1.60	4.4	*2.20Je	NC	7	*16.3	73	30
131	S	Penn P. & L.	26	1.25	4.8	1.66Se	6	5	15.7	75	34

Annual Rev. (Mill.)		(Continued)	11/25/59 Price About	Dividend Rate	Approx. Yield	Recent Share Earns.	% Increase	Aver. Incr. In Sh. Earns. 1953-58	Price-Earn. Ratio	Div. Pay-out	Approx. Common Stock Equity
248	S	Phila. Elec.	51	2.24	4.4	2.85Se	3	3	17.9	79	38
36	O	Portland Gen. Elec.	26	1.20	4.6	1.64Se	D13	7	15.8	73	37
72	S	Potomac Elec. Pr.	28	1.32	4.7	*1.64Se	12	6	*17.1	80	36
97	S	Pub. Serv. of Colo.	54	1.90k	3.5	2.57Se	—	5	21.0	74	33
344	S	Pub. Serv. E. & G.	37	1.80	4.9	2.45Se	10	3	15.1	73	34
81	S	Pub. Serv. of Ind.	43	2.10	4.9	2.80Se	D1	4	15.4	75	33
32	O	Pub. Serv. of N. H.	18	1.00	5.6	1.30Oc	4	6	13.8	77	36
15	O	Pub. Serv. of N. M.	32	.90	2.5	1.51Se	12	13	21.2	60	34
27	S	Puget Sound P. & L.	32	1.44	4.5	2.07Je	9	10	15.5	70	42
65	S	Rochester G. & E.	44	1.80o	4.1	*3.33Se	28	4	*13.2	54	34
9	S	St. Joseph L. & P.	32	1.50n	4.7	2.24Se	18	2	14.3	67	34
59	S	San Diego G. & E.	26	1.12	4.3	1.78Se	40	3	14.6	63	35
11	O	Savannah E. & P.	28	1.00	3.6	1.25Se	D19	8	22.4	80	32
11	O	Sierra Pacific Pr.	36	1.40	3.9	2.26Se	17	8	15.9	62	31
256	S	So. Calif. Edison	60	2.60	4.3	3.73Se	6	8	16.1	70	36
50	S	So. Carolina E. & G.	34	1.30	3.8	1.77Se	D4	11	19.2	73	33
7	O	Southern Colo. Pr.	18	.90	5.0	1.30Au	D12	4	13.8	70	36
272	S	Southern Co.	39	1.30	3.3	1.89Se	6	7	20.6	69	34
20	S	So. Indiana G. & E.	31	1.60	5.2	2.43Je	D1	3	12.8	66	35
8	O	So. Nevada Power	28	1.10	3.9	1.78Se	23	6	15.7	62	46
4	O	Southwestern E. S.	17	.72	4.2	1.00Oc	6	5	17.0	72	28
44	S	Southwestern P. S.	46	1.56	3.4	2.02Se	15	3	22.8	77	36
32	A	Tampa Elec.	25	.60	2.4	.93Oc	10	9	26.8	65	33
168	S	Texas Utils.	69	1.92	2.8	2.86Se	6	11	24.1	67	41
42	S	Toledo Edison	16	.70	4.4	1.16Se	5	4	13.8	60	31
17	O	Tucson G. E. L. & P.	24	.76	3.2	1.08Se	D10	9	22.2	70	41
132	S	Union Elec. of Mo.	33	1.64	5.0	*1.72Se	NC	6	*19.2	95	32
36	O	United Illum.	28	1.38	4.9	1.64Se	1	3	17.1	84	50
6	O	Upper Peninsula Pr.	29	1.60	5.5	1.73Se	5	2	16.8	92	32
45	S	Utah Power & Light	33	1.32	4.0	1.85Oc	6	6	17.8	71	44
140	S	Virginia E. & P.	36	1.10	3.1	1.66Se	2	13	21.7	66	40
31	S	Wash. Water Pr.	44	2.00	4.5	*2.73Oc	20	6	*16.1	73	32
142	S	West Penn Elec.	37	1.60	4.3	2.34Se	5	6	15.8	68	32
77	O	West Penn Power	58	2.40	4.1	3.48Je	6	6	16.7	69	38
12	O	Western Lt. & Tel.	40	2.00	5.0	3.18Se	15	2	12.6	63	41
28	O	Western Mass. Cos.	26	1.20	4.6	1.69Se	2	—	15.4	71	50
119	S	Wisc. Elec. Pr. (Cons.)	38	1.80	4.8	2.75Se	25	1	13.8	65	40
44	O	Wisconsin P. & L.	32	1.48	4.6	2.19Je	14	3	14.6	68	37
43	S	Wisconsin P. S.	26	1.30	5.0	1.87Se	8	3	13.9	70	35
		Averages			4.3%		7%	6%	16.9	70%	
		Foreign Companies									
215	S	Amer. & Foreign Pr.	8¼	$ .50	5.9%	$2.04Je	D6%	0%	4.2	24%	57%
129	A	Brazilian Traction	5	—	—	.64De	D58	—	7.8	—	76
83	A	British Col. Pr.	37	1.40	3.8	1.95De	D16	7	19.0	72	28
20	O	Calgary Power	90	2.00	2.2	4.46De	11	18	20.2	45	31
19	A	Gatineau Power	37	1.50	4.1	2.55De	7	9	14.5	59	35
49	O	Mexican L. & P.	15	1.00b	6.7	1.66De	D16	—	9.0	60	41
15	A	Quebec Power	35	1.60	4.6	2.34De	8	10	15.0	68	53
71	A	Shawinigan Water & Pr.	30	.68	2.3	1.60De	5	23	18.8	43	38

*Deferred taxes resulting from liberalized depreciation are not normalized. If they had been normalized the price-earnings ratio would be higher. **On average shares. †Stock dividends (only) are paid on the "A" shares. D—Decrease. NC—Not comparable. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July; Au—August; Se—September; Oc—October; N—November; De—December. b—Also 5 per cent stock dividend May 1, 1959. c—Also 5 per cent stock dividend June 10, 1959. f—Also stock dividend of one-half per cent quarterly. h—Also 2½ per cent stock dividend December 1, 1959, included in the yield. i—Also 15 per cent stock dividend January 29, 1959. j—Also 3 per cent stock dividend (paid each year end) included in the yield. k—Also 5 per cent stock dividend payable February 20, 1959. m—Also 5 per cent stock dividend June 15, 1959. n—Also 10 per cent stock dividend November 20, 1959. o—Also 3 per cent stock dividend January 25, 1960.

What Others Think

A Utility President Looks at Area Development

"SENTIMENT for participation in area development programs on the part of utility managements is already strong and growing stronger," declared Harllee Branch, Jr., president of The Southern Company, at the sixth annual area development workshop last October in Phoenix, Arizona. He said the group of companies with which he is associated has been active in such programs for many years. Some of the programs arranged by his organization have served to inspire similar programs elsewhere, he said. Branch stated:

> What is a true community and area development program? What facets of community life, what interests, and what kinds of activities should it embrace? Why should an electric utility company assume responsibility for such a program? What kind of man or woman is suited to direct it? And, finally, what return may a utility company expect to receive for its expenditures and efforts in this field?

A community or area development program should have the following three qualities, Branch said: (1) be comprehensive enough to embrace all aspects of community or area life; (2) be sufficiently diversified in interest, content, and purpose to excite and challenge every segment of the population; and (3) be aimed at realistic development—that is, the accentuation and more effective utilization —of the particular human and physical resources possessed by the area or community in question.

Branch emphasized that such programs should serve the interests of all the community or they should not be sponsored by public utilities. He said he did not mean by this that every item or activity of a development program must be universal in its appeal and benefits; but if it is applicable to only a select group, it is not a program worth supporting.

HE also pointed out that an area development program must be backed by the community as a whole or it is doomed to failure no matter how enthusiastically it may be launched. Branch said:

> Many area development programs are limited to industrial and economic promotion. While this is a desirable goal, nevertheless I do not think it should be made an end in itself. An effort should be made not only to increase the industrial skills and opportunities of the people, but also to improve their cultural and spiritual capacities and their sense of civic and political responsibility. . . .

Branch went on to say that a community program to be really effective, should aim at utilizing the particular human and other resources possessed by a community. He said every community has special natural endowments and that these should be developed and capitalized to the utmost.

HOWEVER, Branch took pains to explain he did not mean changes should not be made in communities where they seem needed. For example, a community that is predominantly agricultural does not necessarily have to remain that way. But development programs, by and large, he believes, have to be tailored to the needs and conditions of the area.

Branch stated:

> . . . Why should electric utility companies assume responsibility for area and community development programs? Strictly speaking, an electric utility exists to supply a specific service—to furnish a form of energy to homes, farms, offices, and factories. It is not intended to be an educational or cultural society, a religious or benevolent organization, or a do-gooder establishment. Why then should such a company be interested in any corporate activity beyond giving good service and collecting its bills?

He said the simplest answer is that an electric utility can grow only as its territory grows and as the standards of living and economic efficiency in its territory are improved. Branch also mentioned that an electric utility, unlike the ordinary merchant and manufacturer, cannot pick up and leave an unprogressive community for a more promising location. But, he said, a utility can do much to increase the happiness and profit of its situation by energetic and enlightened inspiration of higher tastes, desires, and talents of the people. And he stated that he knew of no better device than a well-conceived and efficiently conducted area development program.

What Type of Man Should Lead Such a Program?

THE SOUTHERN COMPANY'S president said an area development program required an executive of broad interests and wide understanding. He should be also talented in public relations and have a strong capacity for leadership. He said, "I don't know of a better image, or impression, a utility can create than that of an organization eager to work, advise, lead, and co-operate with all who have the betterment of the community at heart."

This good corporate image can be formed by an intelligent and ably directed area development program.

Some of the other abilities an area development executive should possess, he said, are as follows:

> He should be a man who can work with others and, even more important, who can inspire others to work together among themselves. . . .
>
> He should be a practical man rather than a dreamer or messiah. . . . He should be a man who can plan logically, carefully, and thoroughly. . . .
>
> He should be a man of such versatility that he can work with many groups and agencies not only at home but in other sections of the nation. These groups include representatives of industrial concerns, financial institutions, research organizations, colleges and universities, government agencies, and various others.
>
> He should know how to select and work with experts and specialists, for he will surely need their services, but he must have the ability, while co-operating with them, not to become him-

self too enmeshed in the specialized and fractionalized phases of the development program.

BRANCH gave an example of what he meant. He told of a company that found that few communities in its area, none of the small ones and only a handful of the larger ones, had made any physical arrangements for the accommodation of new factory buildings. And yet these towns wanted industries. Needed were industrial tracts, created under proper zoning laws and furnished with utilities, highways, access roads, railroad sidings, neighboring tracts for housing development, and so on.

As a result, the company's area development executive enlisted the services of municipal planning experts on the faculty and among the advanced students of one of the state colleges. He put them to work on making plans and blueprints for the orderly improvement of these backward communities. In the course of his association with the experts, he became something of an expert himself, but he left that function to be performed by others. From the list of qualities suggested, Branch related:

> . . . you will see that the qualifications of an area development executive should closely approach those of a chief executive of a utility company. If this seems too exacting a requirement, I would only remind you that the ultimate responsibility of a chief executive is public relations—so directing all the functions and activities of the company (sales, operations, system planning, financing, etc.) as to win public favor and support. Since area development is essentially a public relations activity, the executive who guides it will necessarily be a right arm of the chief executive and his work will, to a considerable extent, parallel and complement that of the president of the company.

WHAT returns should an electric utility expect for the money it expends to achieve a successful area development program? Branch stated that based on the experience of his own companies, they consist of increased sales and revenues, higher morale among employees, and a more favorable relationship with the public, increased investor interest in, and prestige for, the company's securities; and valuable insurance against the encroachments of government power.

Finally, he said, and topping all the benefits, "is the sense of creative participation in civic affairs which is derived not only by the company itself but by all who invest in and work for it. This is a valuable aid for breathing life and personality into the corporate image and for building self-respect, enthusiasm, and loyalty among employees."

Branch said he felt such programs did far more than the moneys annually spent for slick and useless gimmicks in trying to achieve such goals.

Senate Committee Hearings on Regulatory Bills

THE Senate Subcommittee on Administrative Practice and Procedure conducted hearings on November 19th and 20th on bills which pertain to the regulatory agencies. Senator Hart (Democrat, Michigan), acting chairman, heard testimony from the "big six" federal regulatory commissions, as well as from the Department of Agriculture and the Interior Department. These latter two de-

partments exercise some regulatory functions.

Two bills are being considered by the subcommittee. One, S 2374, has been introduced by Senator Carroll (Democrat, Colorado) at the request of the American Bar Association. The subcommittee is headed by Senator Carroll, although he did not participate in the recent hearings. His bill would make it a crime to attempt to influence commissioners and hearing examiners. The other bill before the subcommittee is the more extensive S 600, introduced by Senator Hennings (Democrat, Missouri) and Senator Hart (Democrat, Michigan). This bill would set up an office of federal administrative practitioners and experts on regulatory law.

LEADING off as the first witness was John C. Doerfer, chairman of the Federal Communications Commission. He pointed out that each of the present regulatory agencies has its own unique problems and modes of operation. He called for careful scrutiny of S 600 and he felt that administrative difficulties seemed "implicit" in any superimposing on diverse regulatory agencies of an integrating body of the type proposed. He cautioned that such administrative difficulties would arise if the proposed new body were to act authoritatively instead of in an advisory capacity. He said:

> . . . in the final analysis, in the event that body construed its jurisdiction in a manner so as to encumber agencies with demands for a numerous succession of reports and informations, or procedures ill-adapted to an agency's needs and the needs of the public, then it would appear that objectives of this title and the economies proposed to be achieved thereby would be largely counterbalanced by seriously impairing the agency's ability to fulfill its statutory obligation.

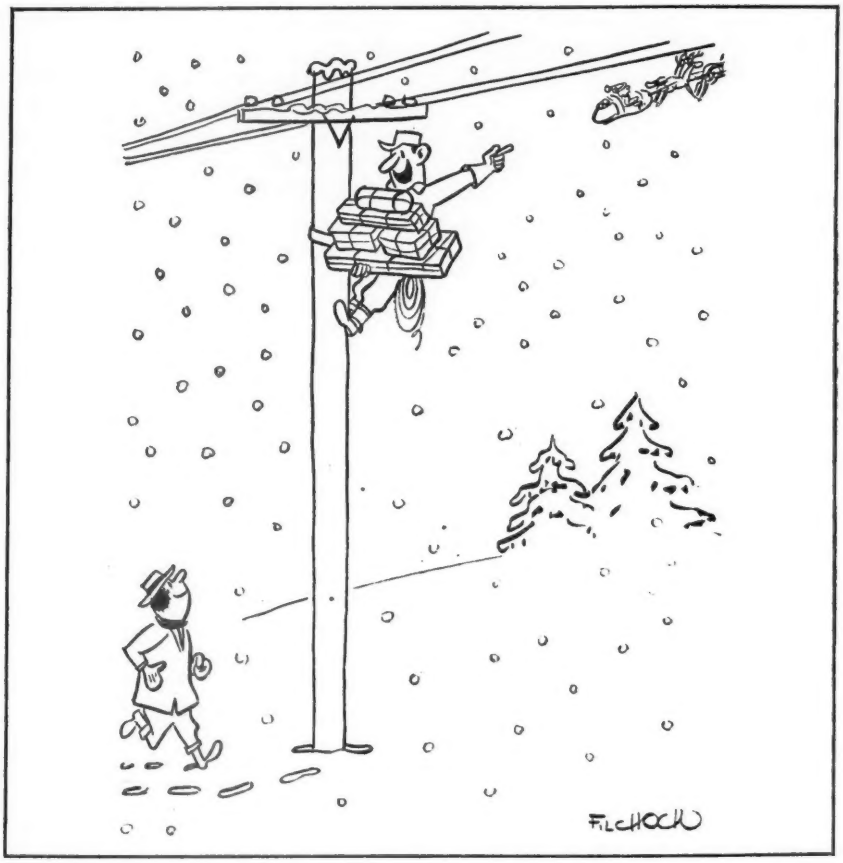
He said that in his judgment the source of much delay in agency proceedings comes from the existence of statutory provisions which permit persons with remote and vaguely defined interest to demand the right to participate in agency proceedings.

In closing he stated:

> . . . Therefore, it seems to us that the question of eliminating undue delays cannot meaningfully be approached solely in terms of procedural reform, but must also take into account the advisability of re-examining those legal concepts which have contributed substantially to preventing agencies from bringing proceedings to an expeditious conclusion.

THE second witness to appear before the subcommittee was Charles W. Bucy, the assistant general counsel for the Department of Agriculture. Mr. Bucy observed that the Department of Agriculture has a vital interest in any proposed changes in administrative law. He noted that it is not often realized that the department administers over 50 regulatory statutes relating to agricultural commodities and their products.

S 2374 contains a provision that would make it unlawful for any agency member or hearing officer to permit, receive, entertain, or consider any ex parte representations, except in circumstances authorized by law or upon reasonable notice to all parties. Mr. Bucy questioned the wisdom of this section. He stated that the term "agency member" has a definite meaning as applied to commissions and boards. However, such a term has "uncertain" meaning when applied to an executive department such as the Department of Agriculture. He went on to ask for a clarification of the phrase "except in circumstances authorized by law."



Clear definitions, he emphasized, are particularly important since a violation of the bill would be a criminal act.

THE chairman of the Securities and Exchange Commission, Edward N. Gadsby, noted that a new independent agency, as proposed by S 600, would not have any veto power over the rule-making powers which have been delegated to independent agencies by Congress. He observed that since individual agencies were most familiar with their own particular problems, such an agency is in the best position to judge which procedures will lead to the fairest and most efficient conduct of their business.

Turning his attention to S 2374, Mr. Gadsby stated:

> Furthermore, it should be noted that § 3, in its efforts to be inclusive, has inadvertently gone further than it intended. Thus, for example, as it is drafted, it makes it unlawful for a commissioner to receive an ex parte communication. Under this wording, as liberally construed, a commissioner would be engaging in conduct proscribed by § 3 if someone mailed him

> a letter merely inquiring as to the status of a case, even though the commissioner had not invited and did not expect the letter. . . .

It was pointed out that the restriction of the solicitation of private communications, in quasi-legislative functions, would deprive the Securities and Exchange Commission of the opportunity for informal discussions of problems which might arise out of proposed rules. Such discussions, Mr. Gadsby believes, should not be outlawed with members of regulated industry, representatives of professional groups, such as bar associations and accounting offices.

SOLICITOR George W. Abbott represented the Department of the Interior and he also called for clarification in S 2374. He said:

> Unless there is a fairly precise delineation of the types of proceedings to which the bill applies, compliance with the statute will be difficult. The need for clarity in this regard is the more important because the bill imposes a criminal penalty.

He noted that the bill would appear to eliminate any consideration of judicially or officially noted facts in reaching a decision in "hearing proceedings" covered by it. He stated that under the Administrative Procedure Act such practice is permitted and it is now being followed with desirable results.

Under S 600, Mr. Abbott observed, all the functions of the Administrator of General Services under the Federal Register Act would be transferred to the Office of Federal Administrative Practice. In 1957 the Attorney General established an Office of Administrative Procedure in the Department of Justice and as a result the Bureau of the Budget opposed the creation of a new and similar statutory agency.

However, Mr. Abbott did not feel that the Department of the Interior was qualified to judge if there should be an acceleration of the activities of the present Office of Administrative Procedure or whether that office should be divorced from the Department of Justice as proposed in S 600.

THE second day of hearings commenced with a statement by James R. Durfee, chairman of the Civil Aeronautics Board.

In his opening remarks he said that this was the first time in thirteen years that the Senate had taken a look at the administrative agencies to determine how they are operating under the Administrative Procedure Act and to investigate how the agencies are exercising the power delegated to them by Congress. Mr. Durfee applauded this "timely and appropriate" action.

The chairman of the Civil Aeronautics Board stated that the most difficult problem facing the board is "delay in our administrative process." He stated that the Federal Aviation Act and the Administrative Procedure Act, because of their quasi-judicial process, contain the inherent seeds of delay.

He stated that there is always a conflict between efficiency and due process of law and that it is impossible to have your cake and eat it too.

Durfee said:

> Congress can pass laws which will bring the board's procedures closer to the court type of proceeding. This may satisfy those who insist upon the utmost legislative precautions to insure a fair and exhastive hearing, but it does not contribute to the original justi-

fication for an agency's existence—an expeditious and prompt dispatch of administrative matters by an expert body.

Mr. Durfee also pointed out that S 2374 might well have the effect of strangling the efficiency of the regulatory agencies.

JEROME K. KUYKENDALL, chairman of the Federal Power Commission, as had several previous witnesses, noted that further definition was needed under the terms of S 2374. In particular he questioned the section of the bill which permits an agency member or hearing officer to receive and consider ex parte communications under "circumstances authorized by law." He stated that this phrase has no clear meaning and should be amended to read "except in circumstances authorized by law—including agency regulations."

Kuykendall also pointed out that the bill fails to say if ex parte communications which are permissible shall be placed in the hearing record upon which the decision is predicated or in the public record in which the proscribed communications are to be placed.

He acknowledged that Congress and the agencies face a dilemma in trying to prevent improper influences and at the same time permitting necessary and appropriate ex parte communications. However, he stated:

> . . . We suggest that one remedy would be to allow ex parte communications in writing in all proceedings and to require that they be placed in the agency's public file but that they not be permitted in the hearing record or considered by the hearing examiner or agency members in reaching a decision. Ex parte communications should be prohibited if they are made orally in the class of proceedings where secrecy is improper.

Regarding S 600 he stated that the emphasis is being devoted to the wrong objectives. Attention, he said, is being directed to bills that would change procedures and organization, whereas the need in the administrative field is to reduce delays.

THE Federal Trade Commission was represented by Chairman Earl W. Kintner. He too pointed out that S 2374 would, by its comprehensive nature, serve to stifle the rule-making process, and he further pointed out that in operating within the strict conformity of the commission's Rules for Adjudicative Proceedings, the commission had experienced no particular problems with respect to ex parte communications.

Chairman Kintner recommended that if S 600 should be enacted functions of the Director, with respect to other agencies, should be expressly limited as being in an advisory capacity only.

The last witness to appear before the subcommittee was Kenneth H. Tuggle, chairman of the Interstate Commerce Commission. He said that if legislation such as S 2374 is necessary, Congress should observe the greatest caution so as not to strip the administrative process of its "characteristic advantages of flexibility and relative informality." Concerning S 600 he stated:

> It is the commission's considered opinion that there is no need for the creation of an additional independent agency with the powers and functions proposed in title I of this bill. . . .

At one point in the hearings Senator Hart observed that the tenor of the testimony seemed to be that "it would be nice

if something could be done, but it can't." Be this as it may, the subcommittee in the near future will take testimony on S 600 and S 2374 from trade associations and attorneys practicing before the agencies.

USITA President Addresses Annual Convention

THE sixty-second annual convention of the United States Independent Telephone Association was held in Chicago on October 11th to 14th.

Hugh A. Barnhart, president of USITA, addressed the group in a speech entitled "Independent Telephony's Finest Hour."

Mr. Barnhart noted that the "fabulous fifties" had seen tremendous growth in the telephone industry and he called this growth the "industry's finest hour."

In a brief review of past accomplishments Mr. Barnhart noted that through the efforts of the telephone industry a termination date had been set for the expiration of the 10 per cent tax on telephone service. He called on the industry to continue its battle to have this tax removed once and for all. Barnhart stated:

> To win the war we must devote our time from now until the next Congress convenes by flooding our subscribers, who after all are the voters, with information about this inequitable tax which they are paying. Tell them that during 1959 the telephone subscribers of this nation will pay a total of $700 million in telephone excise taxes. Let them know time and again that if this tax were removed it would reduce their monthly telephone bills by 10 per cent. . . .

The president of USITA noted that the association, to a large degree, had been responsible for holding the line against proposed changes in the Wage-Hour Law, which would increase minimum wages and would also eliminate the switchboard operators' exemption.

THE importance of advertising was stressed but Mr. Barnhart noted the difficulty in determining the direct benefits derived from such projects. Regarding the telephone industry and advertisement he noted that there was substantial proof that national advertisements had been successful in identifying the independent telephone industry in the public mind, which in turn had provided expansion capital for the companies. The advertisement program has also produced a better atmosphere for more adequate rates of service and has contributed toward the building of good will and public confidence, and promoted the American system of free enterprise.

The United States has the largest telephone saturation of any nation on earth and from all indications the American public still demands more and improved telephone services. The USITA's marketing committee has shown itself alert to the opportunities in the field of selling. The committee's purpose is "profit-boosting through idea-sharing." The committee has suggested that any companies which have not undertaken such a program should take a page from the book of the Bell system. Bell, as well as General and United, have proven conclusively that substantial revenues are available to any company which commences an effective merchandising campaign. Mr. Barnhart observed that it was the purpose of the association to lead the way in such pro-

grams and act as a clearinghouse for ideas. He stated:

> Most of us overlook the fact of what a big advantage we have in selling our new products and services. Our salesmen and women are always given close attention when the subscriber is called over the telephone. Our installers are welcomed inside the home, instead of stopped at the doorstep, and every member of the family joins in a telephone planning conference with them. No other salesman has such an opportunity. I wonder how many of us are missing out on making an approach. Remember the door is always open for us.

It was pointed out that in this age of automation fewer and fewer personal contacts are made. The customer no longer has the opportunity to chat with the switchboard operators, and good public relations, therefore, becomes second only to good service.

The broad scope of USITA was highlighted when Mr. Barnhart noted that 200 companies had joined its membership during the past four years. The heart of USITA, he believes, is large enough to embrace the interests of all companies, large or small, be they financed by banks, lending institutions, manufacturers, insurance companies, or REA. Regarding the REA Mr. Barnhart stated that 204 REA-financed companies are now members of the association and nine members of the board of directors are REA borrowers.

Mr. Barnhart noted with pride that the nation's two newest states, Alaska and Hawaii, are entirely served by independent companies.

The tremendous strides of the past few years, as related to consumer goods, were noted, and Mr. Barnhart stated:

> . . . If we work with others, if we work together, we can attain every goal we can ever dream of. The story of communications, I am convinced, has only begun. As the story unfolds in the years ahead, we must continue to do our utmost to assure the very best for our customers, our employees, and our shareholders.

Mr. Barnhart thanked the various members of USITA and stated that the association's program could not have been carried out without their help and co-operation.

A Look at Russia's Electric Power

Edwin Vennard, vice president and managing director of the Edison Electric Institute, in New York recently prepared an evaluation of Russia's electric power industry for the subcommittee on economic statistics of the Joint Economic Committee of Congress. The committee is trying to make "comparisons of U. S.-Soviet economic growth." The report was based on two visits to inspect electric power installations and facilities, conducted under the auspices of the EEI and the Association of Edison Illuminating Companies, trade associations of investor-owned electric utilities.

Vennard reported that there are 52 power systems in all of the USSR. Many of these are individual plants, not interconnected with any power grid. There are three main interconnected systems. Each of these systems has a capacity of six or seven million kilowatts. At some indeterminate time in the future, these three systems are to be linked with other systems

in European Russia and six systems in Central Siberia to form a single power grid.

The EEI director said that "Russia places great emphasis upon the building of the industrial plant or the machinery of production. As a consequence, about 80 per cent of the total production of electricity is for industrial purposes. The remaining 20 per cent is used by commercial establishments, the homes, and the farms."

The most modern steam electric plant operating in Russia today is the 450,000-kilowatt station at Cherepetz. At the Youzhno-Uralsk thermal station, near Chelyabinsk, the Russians have a plant with 600,000-kilowatt capacity. Two 200,000-kilowatt units are being added which will bring the total capacity up to 1 million kilowatts.

The Soviets have a number of large hydroelectric stations, one with a capacity of 2.3 million kilowatts and another under construction that will boast 4.5 million kilowatts capacity.

Status of Atomic Power

THE Russians have only one 5,000-kilowatt atomic power station and one 100,000-kilowatt dual-purpose plant actually in operation. Several others totaling 360,000 kilowatts are under construction.

By way of contrast, Vennard pointed out, the United States now has three atomic power plants in operation with a total capacity of 72,500 kilowatts. He said:

> By the end of 1958, a little over four years since the passage of the 1954 Atomic Energy Act (which permitted industry for the first time to engage in development and construction of its own atomic plants), a total of 131 electric power companies and associated service organizations were participating in projects for the development and construction of 16 atomic power plants and 11 major research, development, and study projects.
>
> The 16 plants in which the electric power companies are participating will have a combined capacity of about 1.4 million kilowatts and will require an estimated expenditure by the companies of more than $570 million.

USSR scientists told the EEI visitors that their atomic power program was still in the research and development stage. Russia's experience in producing atomic power shows that it is above the cost of producing electricity with conventional fuels and thus it does not plan any large-scale development until the economics get better.

VENNARD reported that the technical skill of the Russian power specialists was good. They make good turbines and generators, he said. Their research facilities are good and they have done much interesting transmission work. There are 1,100 miles of lines operating at 400,000 volts and it is expected that these lines will shortly be converted to 500,000 volts. And an 800,000-volt direct current transmission line from Stalingrad hydroelectric station to the Don Basin is expected to be completed in 1962, a distance of 300 miles.

As to construction plans of the Russians for adding additional kilowatts, Vennard said:

> We were told that Russia plans to install 60 million additional kilowatts by the end of 1965, which would bring the USSR total capacity to something over 108 million kilowatts.
>
> By comparison, we have under construction in America 51 million kilo-

watts of new capacity for the four years ending 1961. The new capacity we will have installed from 1958-61 is slightly greater than Russia's present total. . . .

ACCORDING to a chart shown by Vennard, the United States would have 245 million kilowatts by 1965 whereas the Russians would have only 108 million. At the end of 1958 the U. S. power capacity was 160,219,000 kilowatts—Russia's, 53.1 million kilowatts. He also pointed out the disparity between the U. S. and the USSR by citing the fact that the average home use of electricity in Russia is only 400 kilowatt-hours a year compared to an average use in the U. S. of 3,400 kilowatts annually.

Investment and production costs for electricity are not much different in Russia than they are in the United States, the EEI executive related. Investment per kilowatt for hydro plants ranged from $87 to $225 while for steam plants one plant had a cost of $110 and another $180. The production cost per kilowatt-hour at a typical steam plant, including 1.77 mills for amortization, amounted to about 9 mills. However, Vennard stated, because of the absence of interest and taxes, the reported cost of producing hydroelectric power in some stations was quite low—as little as one mill per kilowatt-hour in some cases.

Emphasis Now on Thermal Plants

We were told that in the future Russia will place less emphasis on the development of hydro and more emphasis on thermal plants. Of the 60 million kilowatts of new capacity planned by 1965, we were told that 85 per cent is expected to be thermal and 15 per cent hydro, compared to the present ratio of 81 per cent thermal and 19 per cent hydro. . . . We were told that the reason for the change in policy is that the hydroelectric plants are more expensive and they take longer to build.

This experience coincides with that of power companies in America, Vennard said. Also we favor thermal steam plants because they can be built closer to the load centers.

THE price of electricity to industry was not obtainable. But the price covers the cost of making the power plus some margin. Vennard stated:

> The price of residential electricity is a flat 40 kopecks per kilowatt-hour. At 10 rubles per dollar, this is equivalent to 4 cents a kilowatt-hour for all use. In America we follow the practice of providing a sliding-scale rate for all use of electricity. For residential service this may start in the neighborhood of 4 to 6 cents a kilowatt-hour and scale on down to 1½ cents to 2 cents a kilowatt-hour. The average price of all residential electricity in the U. S. is about 2.53 cents a kilowatt-hour.

In evaluating the Russian electric power industry, Vennard declared he doubted that Russian production could equal that of the United States in the foreseeable future. He said that while the Russians have been successful and competent in selected areas, they have not done well in others. Their industry has grown, but not always in the quantity ordered by the Soviet planners and not always of the best quality. "I do not believe Russia will catch up with us economically unless they adopt the incentives and rewards of the free enterprise system more fully than they have begun to do, or unless we in the United States abandon our free system."

The March of Events

Alabama

Relocation Fund Bill Dies

A BILL which would have appropriated almost $100,000 in state money for the relocating of utility facilities in connection with the building of interstate highways was killed in the Alabama state senate. The measure would have paid money to utility companies for moving their power and telephone poles and gas pipelines when the facilities had to be moved because of interstate highway construction. This money would have been matched by the federal government on a 9-1 basis. The total amount going to utilities would have been close to $1 million.

Seeks Rate Boost

THE Alabama Gas Corporation has asked the state public service commission to grant it an immediate $2.9 million increase in rates to offset increased wholesale costs. Its supplier, Southern Natural Gas Company, boosted prices, effective November 1st.

Alabama Gas also asked for $1.5 million it said it should have received from a previous rate hike granted in September, 1958. The company said it received $1.5 million less than anticipated under a 6 per cent rate boost granted then by the commission.

Arizona

Interim Gas Rate Increase Approved

THE state corporation commission has issued an interim order calling for a 3 to 5 per cent increase in commercial and industrial gas rates of Arizona Public Service Company and changing residential rates to a heat unit measurement for billing purposes. The order, effective December 1st, will be given a six-month trial. It was approved by Commission Chairman George F. Senner, Jr., and Commissioner A. P. Buzard, with Commissioner E. T. Williams dissenting.

The heat unit formula for billing residential customers has been in use in the Phoenix area for some time. Other areas of the state have been billed on a volume basis.

California

Asks Funds to Curb Gas Rate Boosts

IN its continuing fight to curb increases in gas rates for consumers in the state, the public utilities commission has asked for additional funds with which to hire experts for representation at rate hearings of producers and pipeline companies. Commission President McKeage complained that utilities do not fight hard enough against wholesale supply gas rate increases simply because it seems comparatively easy to get a local or state adjustment on rates and pass the increase along to the consumer.

It was estimated by the counsel for the commission that if rate cases now pending were settled in a manner favorable to the state's interests, that ratepayers could be saved $50 million.

Georgia

Electric Rates Reduced

A SUBSTANTIAL reduction in electric rates for Georgia Power Company's Valdosta division customers will become effective March 1, 1960, the public service commission has announced. The reduction, which will affect 20 south Georgia counties, will result in customer savings of about $2 million during the year.

The reduction in rates comes about because of the commission's order issued at the time the Georgia Power Company purchased Georgia Power & Light Company properties, now the Valdosta division. At that time power had to be purchased at higher rates from the Florida Power Corporation. Since then Georgia Power Company has built its own facilities in the area and can now serve it through its integrated system.

The new rates are to make them conform with rates that power is sold for elsewhere in the state by Georgia Power. One of the major Georgia Power Company construction projects that will play an important part in bringing low-cost power to Valdosta is the 1 million-kilowatt Southern Electric generating steam plant on the Coosa river in Alabama.

Illinois

Gas Expansion Sought

NATURAL GAS PIPELINE COMPANY OF AMERICA, subsidiary of The Peoples Gas Light & Coke Company, has applied to the Federal Power Commission for approval of a pipeline expansion project which would substantially increase gas supplies in the Chicago area. The cost of the new pipeline would be about $31 million and would increase the peak capacity of Natural Gas Pipeline by 100 million cubic feet of gas to 830 million cubic feet. The new gas supplies would be apportioned among customer utility companies in the Chicago area. Peoples Gas would receive approximately 40 million cubic feet.

About 151 miles of 36-inch pipeline are involved, in intermittent sections paralleling main-line facilities in Ford county, Kansas, and Joliet, Illinois, plus 180 miles of 24-inch line in Kansas and Oklahoma.

Maryland

County Utility Taxes Opposed

J. THEODORE WOLFE, president of the Baltimore Gas & Electric Company, has branded as "unfair and discriminatory" utility taxes proposed in the 1960 budget of the county of Baltimore. He urged the Baltimore county council to reject the proposal on the grounds that (1) "users of utility services are already bearing a disproportionate and unfair tax burden"; (2) "the proposed special taxes on utility services and fuels would impose a greater burden on the majority of home owners than an equivalent increase in the property tax rate"; (3) he urged that no new taxes be imposed on utility services and competitive fuels, and that at the earliest possible date the present tax on industrial and commercial electricity be eliminated.

Massachusetts

New Commission Sought

A BILL to reduce the membership of the state public utilities commission from seven to three has been filed for consideration by the 1960 state legislature. The measure was offered by Represenatives Richard Dolan of Westfield and Thomas T. Gray of Springfield, who estimated it would save the state approximately $50,000 a year.

Minnesota

City Gas Plant Defeated

THE small village of Blaine, Minnesota, population of 5,000, decided against municipal ownership of a gas plant recently by a vote of 421 to 47. The company involved was North Central Public Service Company of St. Paul.

At election time the issues were: (1) Rates: The company's were lower for heating customers; the town's were lower for nonheating customers. (2) Bond issues: Should the town incur new obligations when it was already faced with increased taxes, school, water, and sewage problems? (3) Area to be served: Town's engineers proposed to serve a larger area at a higher construction cost per meter than the company's plan. (4) Time: A key point in North Central's plan was its ability to move in and start construction at once following allocations of gas supplies by the FPC, whereas the village would incur various delays.

Texas

FPC Opposes Gas Facilities

THE Transcontinental Gas Pipe Line Corporation of Houston, Texas, has been authorized by the FPC to build $53,373,400 worth of new pipeline facilities which will boost the company's capacity to move natural gas by 155,107,000 cubic feet a day. Included in the FPC's decision was an order to sell 7.4 million cubic feet of natural gas daily by Transco to a new customer, Palmerton Gas Company of Lehighton, Pennsylvania. Applications by independent producers to sell natural gas to Transco were also approved. Despite objections by some interveners in the case, the FPC said new gas from southern and offshore Louisiana could be sold to Transco at prices of 21½ and 22 cents per thousand cubic feet, plus possible taxes of up to 2.05 cents.

Progress of Regulation

Trends and Topics

Amortization Expense for Extraordinary Obsolescence

NORMAL obsolescence of utility property is included in the depreciation charge and is paid by the consumer. Extraordinary, or unforeseeable, obsolescence, however, is not so easily disposed of. With the advance of technology, unanticipated property retirements sometimes become necessary before the cost of the property has been fully recovered in depreciation charges, with the result that substantial losses may be incurred. Who should bear such losses? Should they be charged to earned surplus and permitted to fall on the shoulders of the investor, or should they be amortized as an operating expense for future consumers to pay? Is there such a fundamental difference between normal and extraordinary obsolescence that one should be borne by the ratepayer while the other is carried by the stockholder?

It has been argued that property losses sustained as a result of extraordinary replacements with more efficient equipment should be borne by future consumers because they will benefit by way of decreased operating costs or improved service. Taking another aspect of the argument, if retirement losses are not allowed to be recovered as an operating expense, the utility may be encouraged to keep obsolete property in service until it has been fully depreciated. Moreover, it has been said, a reduction of earned surplus by a substantial write-off of prematurely retired property may injure the utility's ability to attract capital.

Placing Retirement Loss on Investors

Choosing three prime examples of extraordinary utility obsolescence in recent decades, the Mississippi supreme court noted that losses involved in the replacement of streetcars by buses have generally fallen upon the investor, as have losses arising from telephone dial conversion, while, on the other hand, losses resulting from conversion from manufactured to natural gas have generally been placed upon the consumer. In general, the court explains, charges to future operating expenses have been allowed only where the consumer re-

ceives the benefit of the same service at a lower rate or better service at the same rate. And the commission has a right to consider these circumstances. In upholding an order which disapproved a proposed five-year amortization of a dial conversion loss, the court declared that future users of services should not be charged with losses which the company incurs by changing its type of service (28 PUR3d 473).

The question of charging extraordinary obsolescence to future operating expense has been considered in other recent decisions. In accord with the Mississippi view is a 1956 Wisconsin decision in which the commission disallowed amortization of losses on telephone property abandoned because of dial conversion. It is not equitable to charge future consumers for losses incurred by the utility in changing its type of service, said the commission, and it would be unreasonable to make them pay for property retired from service (14 PUR3d 188).

In two 1953 cases, however, the same commission allowed annual amortization of gas manufacturing plant abandoned because of conversion to natural gas. The rule appeared to be founded principally upon the fact that the conversion and the consequent property loss would result in consumer benefits in the form of better fuel and lower rates. But it was made clear that the specific circumstances in the proceedings controlled and that the rule was not to be regarded as a precedent (100 PUR NS 71; 100 PUR NS 467). Nevertheless, in a later case, the Wisconsin commission approved a five-year amortization of telephone equipment abandoned as a result of customer demand for extended area service (15 PUR3d 41).

In denying annual amortization expense for a gas company's production facilities at a particular site, the Illinois commission observed that the company had been authorized to sell the land on which the facilities were located for a consideration which, together with the salvage value of the plant, would afford a net result to the company's advantage. Amortization expense was therefore not warranted (27 PUR3d 209).

The New Jersey commission rejected a proposed operating expense for the retirement of switchboard equipment necessitated by conversion to dial service. The item should be charged to the depreciation reserve account, the commission held, noting that the reserve account was adequate to absorb charge-offs of all property retired in connection with the conversion (84 PUR NS 82).

Consumers Pay for Losses

Notwithstanding the foregoing views, it appears that the trend of authority, as shown by the majority of recently reported rulings, permits losses from extraordinary obsolescence to be charged to the ratepayers over a future period. The North Carolina and Georgia commissions have allowed amortization of extraordinary telephone plant retirements over a period of ten years (29 PUR3d 222; 86 PUR NS 61).

Although it was argued before the California commission that abandoned rail facilities afforded no benefits to present bus riders, amortization of the facilities was allowed as a proper operating expense. Reimbursement for the

unrecovered portion of the cost of the property was a condition upon which bus substitution was predicated, and at the time of the conversion it was decided that both the public and management would be served better by amortizing this nonrecurring cost, along with the cost of dismantling, paving, and disposing of the rail facilities, over a period of years (4 PUR3d 129).

In a gas rate case, gas manufacturing plant held for peaking purposes was found to be unduly expensive in view of the availability of natural gas for this purpose. The Michigan commission ruled that it should be retired and authorized amortization over a four-year period. The charges would be determined after giving effect to tax savings from the abandonment program allowed under federal tax statutes in the year of retirement (22 PUR3d 369). The Massachusetts commission similarly required such tax savings to be taken into account in a transit case, thereby eliminating an undepreciated retirement balance sought to be amortized as an operating expense (79 PUR NS 139).

Apportionment of Loss

The utility has the burden of proof with respect to a claim for extraordinary obsolescence. It must produce evidence, including records which it should be reasonably expected to have, said the Minnesota supreme court, and in the absence of complete evidence, the commission may apply its experience and background of knowledge to reach a just result. The court sustained a decision which apportioned the undepreciated balance of retired transit property, as determined by the commission, equally between investors and consumers over a period of ten years (22 PUR3d 223).

The principle of law which should guide the discretion of the commission in determining whether the customer or investor should be charged with the obsolescence loss is twofold, the court continued. First, the future customer may not be charged for obsolescence through any method of accounting unless the investor has suffered an actual loss by not having fully recovered prudently invested funds. Second, even if such loss has occurred, it is unreasonable to charge the customer if the investor has been compensated for assuming the risk of obsolescence.

In reviewing a District of Columbia case involving the treatment of gas manufacturing property abandoned as a result of conversion to natural gas, a federal appeals court pointed out that if past earnings were not sufficient to compensate the investor for inadequate depreciation charges to cover the abandoned property, the commission may properly require the burden to be borne by the consumers or be shared by investors and consumers, depending on the circumstances (89 PUR NS 177; certiorari denied).

Review of Current Cases

Canadian Gas Import Project Authorized

THE Federal Power Commission has substantially approved an application by Midwestern Gas Transmission Company for authority to construct facilities

needed to import 204,000 Mcf initially of Canadian natural gas. A certificate was granted subject to the granting of an export permit by the Canadian government. Substantial approval was also given to Michigan Wisconsin Pipe Line Company for the construction of pipeline facilities for the resale of most of the imported gas which it will receive from Midwestern and transport into Michigan and Wisconsin.

The gas, produced in the Province of Alberta, will be delivered by Trans-Canada Pipe Lines, Limited, under a firm 25-year contract, at the international boundary near Emerson, Manitoba. From this point, Midwestern's line will proceed south and east some 500 miles through Minnesota and into central Wisconsin, terminating near Marshfield, Wisconsin, where it will connect with facilities to be constructed by Michigan Wisconsin. Midwestern's project includes 504 miles of 24-inch main line, 56 miles of lateral line, and 10,560 compressor horsepower. It will cost an estimated $52,277,000. The company will sell gas to customers in Minnesota, Wisconsin, and North Dakota, including some 158,000 Mcf per day to Michigan Wisconsin.

Michigan Wisconsin will construct a line from Appleton, Wisconsin, to Marshfield to connect its system with the Midwestern line. It will provide 5,280 compressor horsepower at Marshfield. Additional extensions northward are proposed in order to serve the northern peninsula of Michigan and north-central Wisconsin. The estimated cost of the project is $24,177,000.

Financing and Rate Proposals

Midwestern will be required to file rates and financing arrangements satisfactory to the commission. Some rate and other conditions were imposed upon Michigan Wisconsin. The latter's sale for upper peninsula service was required to be made to Michigan Gas & Electric Company, a § 7 (a) intervener, rather than to Michigan Consolidated Gas Company as proposed by Michigan Wisconsin.

Midwestern proposed to finance its northern system by the issuance of $40 million of 20-year first mortgage bonds at an estimated 5½ per cent, $5 million in ten-year unsecured notes, and 800,000 shares of common stock with a net paid-in equity of $8 million. The bonds will be placed through investment bankers, the notes will be sold to institutional investors, and the common stock will be sold to a subsidiary of Tennessee Gas Transmission Company. Under this plan, debt will represent 82 per cent of Midwestern's total capitalization. Since this exceeds the standard of 75 per cent debt previously fixed by the commission, it was necessary to attach a condition prohibiting the payment of dividends on common stock until the total of long-term debt, including the notes, is reduced to 75 per cent of total capitalization.

Proposed plans for financing Midwestern's northern system, as well as proposed rates and sales, were based on a 7 per cent rate of return to be achieved in 1963, the third full year of operation. It was urged that 7 per cent was necessary in view of the high cost of debt money in today's money market. The basic rate proposed for contract demand service in the northern system is a monthly demand charge of $4.75 and a commodity charge of 25.3 cents per Mcf. A demand charge of $5 and a commodity charge of 25.3 cents per Mcf was proposed in a lateral line rate schedule.

Noting that construction of the northern system will not commence for another six months, together with the present uncertainty in the cost of money, the commission could not predict what rate of return would be needed to insure satisfactory financing. It, therefore, required Mid-

western to file, prior to the commencement of construction, firm proposals for financing, at which time a rate of return would be determined. Before the commencement of service, the company must also file rate schedules accompanied by cost-of-service data.

Michigan Wisconsin proposed to finance virtually the entire cost of construction by issuing $24 million bonds at 5½ per cent. This will result in a capitalization ratio of 67 per cent debt and 33 per cent common equity—well within the commission's standard. The company testified that it could finance its project on the basis of a 6¼ per cent rate of return. The commission thought it could be so financed. Questions raised with respect to rate level and tilt will be considered in an appropriate rate proceeding.

A number of § 7(a) applications filed by interveners seeking supplies of gas for communities served by them were approved. *Re Midwestern Gas Transmission Co. et al. Opinion No. 331, Docket Nos. G-18313 et al. October 31, 1959.*

FPC Ruling against Transportation of Gas For Boiler Fuel Overturned

THE Federal Power Commission has no authority to deny a certificate under the Natural Gas Act merely because it disapproves the end use to be made of the gas involved, a federal appeals court held. The commission had refused to authorize Transcontinental Gas Pipe Line Corporation to transport, for the account of Consolidated Edison Company of New York, Inc., gas purchased by Consolidated Edison in Texas (27 PUR3d 99; 28 PUR3d 327).

The gas was to be delivered in New York city where the electric company would use it for boiler fuel. Upon petition by Transco, Consolidated Edison, and the city of New York, the court set aside the commission's order and directed that a certificate be issued. Coal interests joined with the commission in the review proceeding.

Included in the transportation agreement, or "X-20 service," was a provision for a 60-day-a-year service which Transco agreed to render Consolidated Edison from its own gas reserves. The city of New York was interested in the case because the substitution of gas for coal, presently being used to fire Consolidated Edison's boilers at its plant near the United Nations building, would greatly reduce the amount of fly ash and sulfur dioxide poured into the air in this densely populated portion of the city. While the commission recognized that the "conventional requirements" of public convenience and necessity had been satisfied, it, nevertheless, felt compelled to deny the certificate on the basis of five policy reasons:

Policy Reasons Rejected

First, the commission took the view that if the requested certificate was granted, many more requests of the same type would be forthcoming and there would be no fair or rational basis for denying similar requests. This proposition, said the court, is a denial of the discriminatory process which a commission, acting semi-judicially, must exercise.

Second, it was contended that authorization of the proposal would pre-empt capacity which would otherwise be available to meet "more urgent and widely beneficial public needs." This reason was held to be bad since it asserted conserva-

tion authority which the commission does not possess.

Third, the commission thought it should not encourage direct purchases by bidders such as Consolidated Edison because they would be likely to drive up prices in the field. The court considered this proposition an implicit assertion of authority to conserve and allocate supplies, and also unacceptable.

Fourth, the commission pointed out that small purchasers, including some pipelines, would not be able to compete with large individual purchasers. According to the court, the commission urged, in effect, that only pipelines should purchase gas, for only they engage in interstate transportation and thereby come under the authority of the commission. This position was rejected.

Fifth, the commission assumed that the proposed use of gas for boiler fuel was an "inferior" use, which it took into consideration in determining the certificate application. The boilers would generate power for electricity and make steam for heating. "We do not see that using gas to make steam to heat an apartment house is inferior to the use of gas to heat a single family residence whether by steam, hot water, or whatnot," said the court.

No Allocation Authority

The controversy comes down to the scope of the commission's authority under § 7 of the Natural Gas Act, the court indicated. The purchase of gas by Consolidated Edison in Texas is not subject to the jurisdiction of the commission, and, as the presiding examiner has pointed out, if gas so purchased could be liquefied and transported by truck or ship to New York city, the commission would have no voice in the transaction.

The court ruled that the commission had gone beyond its authority in denying the certificate. In effect, the commission had asserted, by its examination and disapproval of the end use to be made of the gas, a general allocation and conservation authority over the country's natural gas fields. No such allocation authority is conferred by the Natural Gas Act. *Consolidated Edison Co. of New York et al. v. Federal Power Commission et al. Nos. 12,908, 12,929, 12,930, November 3, 1959.*

Expense Allowance for Special Municipal Taxes Limited in Telephone Rate Case

THE Arkansas commission authorized the General Telephone Company of the Southwest to increase rates to a level calculated to produce additional gross revenues of not more than $203,653. It found that the company was entitled to a rate of return of 6 to 6.25 per cent. The company had presented testimony and exhibits to support a return ranging from 7¼ to 7½ per cent.

In discussing municipal taxes the commission pointed out that there are various methods used by cities and towns in arriving at the amount of taxes levied against utilities, such as the number of poles in the municipality, the number of customers receiving service within the city, a percentage of gross revenues obtained by the utility within the city, and some a stated amount.

The commission said that public interest requires that a limit be placed upon the amount of municipal special taxes to be rolled into the general tariffs of the company. It concluded that, regardless of the method used by the municipality, the total amount of such taxes to be included in the company's general tariff should not exceed

2 per cent of gross revenue derived from operation in the respective municipalities. It believed that any assessment in excess of that amount would be excessive and should be passed on to subscribers within the corporate limits of the city imposing the tax.

The commission observed that it did not intend to tell the municipalities the amount of taxes they might levy against a utility but that it considered itself obligated to regulate the application of such taxes to utility rates in such manner as to avoid discrimination and undue burden upon those customers not receiving benefit from such taxes.

Cost Allocation

The city of Texarkana filed a motion requesting that the company be required to designate the proportion of its properties and operations devoted to local service and that portion of its properties and operations devoted to toll service in the Texarkana exchange. The commission rejected this motion in view of the fact that it follows the statewide principle of rate making. Under this principle the commission determines the company's revenue requirements for the entire operation within the state. The amount so determined is spread to customers by classes and to exchange groups in accordance with the number of customers receiving service through a single distribution system.

The investment in toll facilities of the independent telephone companies operating in Arkansas is very low as compared to total investment. Toll revenues generated are in the form of commissions received under negotiated contracts with the owners of the network of toll facilities that cover the state. The commission noted that in the operation of the Texarkana exchange all toll revenue is derived from commissions. This revenue is included in total revenues generated through that exchange. All expenses were included in operating and maintenance expense applicable to the operation of the exchange facilities. There was no division or allocation of the properties between exchange and toll service. In view of these facts, the commission concluded that such an allocation would be impractical, wasteful, and unwise. *Re General Teleph. Co. of the Southwest, Docket No. U-1378, May 14, 1959.*

Telephone Boundary Change Denied

THE Missouri commission denied a petition by residents in the service area of the South Missouri Telephone Company for service from the Potosi Telephone Company operating in adjacent territory. The petitioners indicated their primary objection to service from South Missouri was the imposition of toll charges on calls to the town of Potosi, pointing out that Potosi was their political, economic, and social center. They refused to subscribe to service from South Missouri under any circumstances.

The feasibility and loan studies under which South Missouri bought out its predecessor and undertook to provide modern dial service throughout its service area contemplated the inclusion of the contested area. The Potosi Company took neither side in the controversy but indicated its willingness to abide by the commission's decision.

Stated and accurate boundaries are of great importance to the development of rural telephone service, the commission noted. The mere fact that toll charges would accrue to petitioners is an insufficient basis for a holding that established

boundaries are unreasonable or arbitrary. The commission could find nothing in the record to justify an alteration of the boundary lines between the two companies. *Re DeClue et al. Case No. 14,242, October 20, 1959.*

Extension of City Trucking Service to Suburban Area Authorized

THE Colorado commission authorized two motor carriers serving the city of Pueblo, Colorado, under "line-haul" authorities to extend their operations to include pickup and delivery service to an area beyond and contiguous to the city limits on shipments having a prior or subsequent movement over their lines.

Evidence indicated that the city's population had greatly expanded beyond the corporate limits. In fact, the commercial establishments in the area were required to use the carriers on line-haul shipments to other points in the state, and would then require a pickup and delivery service to handle the merchandise moved from and to Pueblo, to and from their establishments.

In other words, it would require a double handling of the merchandise when a through shipment could be obtained. Since this practice occasioned delay, expense, and inconvenience to the shipping public, the commission deemed it to be in the public interest to authorize the expanded operation.

The commission observed that services are rendered to people rather than to areas. All of the establishments involved in this case were well within the populated area known as Pueblo and its environs. The commission believed that use of an artificial political boundary, such as a city limit, as a line of demarcation sets up a false standard in determining economic principles and whether or not the public requires service. *Re Centennial Truck Lines, Inc. et al. Application Nos. 16693, 16694-PP, Case No. 5153, Decision No. 53078, September 25, 1959.*

Unauthorized Operation in Bad Faith Bar to Certification

WHEN can evidence of prior operation without commission approval be received in a certificate proceeding to supply the substantial evidence necessary to support the commission's grant of the requested authority?

The distinction between those violations which are prohibitive and those which will be accepted as competent evidence, pointed out the Pennsylvania supreme court, is to a large degree dependent upon the existence of good faith. If the violation is the result of a bona fide misunderstanding of the service authorized by the commission, there is no substantial basis, either legally or morally, to object to its use in a certification proceeding. On the other hand, where the violation is one resulting from a deliberate disregard of the certificate limitations or the law, then the wrongdoer should not profit from his own deliberate wrong.

In the instant case, the court held that the commission had erred in accepting the evidence of unauthorized operation since the record revealed a callous disregard of the law. To believe otherwise, is to stretch credulity to the limit, the court said.

The record clearly demonstrated that the company had operated its transporta-

tion service either with a definite knowledge of its lack of authority or with a complete indifference to the extent of its authority.

Even though the company knew it was operating in violation of its certificated rights at the time of filing the present application, its application certified under oath that it was not engaged in transportation other than that authorized by the certificate.

The company admitted, through its president, that it was still operating illegally in spite of at least two convictions for such violations within a year of the time of filing the present application. When its president was asked if he would accept transportation not covered by the extension of rights, he replied: "If it is approved, I will go home and be a good boy—until then I'll operate illegal."

Under such circumstances, said the court, the commission's issuance of the certificate cannot be based on the reception of evidence of the company's illegal and unlawful operation, even if it be assumed, arguendo, that such evidence was sufficient to support the authorization. Excluding such testimony, the record failed to disclose the substantial evidence required to sustain the action of the commission and reversal was required. *D. F. Bast, Inc. et al. v. Pennsylvania Pub. Utility Commission et al. 154 A2d 505.*

Commission Sympathetic to "Poor Investment" Argument

THE California commission listened sympathetically to a gas company's "poor investment" argument, then to the staff's contention that the alleged poor investment should be treated as contributions in aid of construction and deducted from the rate base notwithstanding that the expected contributions were not received by the company, and ended up by making a middle-of-the-road adjustment which charged only that portion of the line in use as contributions in aid of construction.

This is how the situation arose: The company had expended $31,455 to build a four-inch line. It had originally expected that the money would be contributed to it but because of circumstances allegedly beyond its control, it had not received the contribution and had financed the cost with its own funds.

The company disagreed with the staff treatment of the matter as a contribution and the resulting reduction in the rate base. The company argued that the peculiar circumstances surrounding the investment and subsequent loss of the end-of-line sale, due in part to refusal of the company's supplier to permit the sale, resulted in complete failure of receipt of the expected contribution from the customer. The company's position was that the investment in the line should more properly be termed a "poor investment" for which it should not be penalized, unless the commission was prepared to reward it for every "good investment" it might make. A portion of the line was currently in use serving several customers and the cost of an equivalent two-inch line necessary to serve such customers was $20,812.

In the commission's opinion, it was not reasonable to adjust for the entire cost, and since currently the line was in use, the rate-making adjustment was limited to the difference between the cost of the two-inch and four-inch lines.

Capitalized Gas

The staff pointed out that there were certain line failures in 1957 and 1958 which had caused the company to suffer

losses in gas. The company had capitalized the excess loss in order to show only a nominal line loss. The staff did not consider it a proper capital charge and had removed the amount from plant for rate-making purposes.

The company alleged that gas used for testing, purging, and packing was a proper capital charge, that the staff had made no allowance for any gas so used, that the years 1957 and 1958 were years of growth during which large-size major pipelines were installed, and that its allowance for capitalized gas was proper.

The commission found the staff's action reasonable, and excluded the capitalized gas amounts from the rate base. There had been no breakdown showing what amounted to line pack and what amounted to line loss. It would cost less than $300 to pack and purge the new line, and the amount in issue was $33,400. The bulk of the amount was due to line loss.

Common Utility Adjustment

The staff had showed an $11,000 adjustment, classified as common utility adjustment, as the California portion for merger costs with an out-of-state utility. Exclusion of this amount from the rate base was proper, thought the commission.

Working Capital Allowance

The commission agreed with the company that the staff's allowance for materials and supplies, on the basis of the ratio of California average gross plant to total system average gross plant, was improper because it tied materials and supplies directly with gross plant and not with construction. The company's estimate of working cash allowance, predicated principally on one-eighth of cash operating expenses, was accepted over the staff's judgment amount of one month's purchased gas and two months' other operating expenses, excluding taxes and depreciation.

Sales Promotion Expense

The staff's estimate of sales promotion expense exceeded the company's because the staff had charged all of the salesmen's salaries to expense whereas the company had capitalized 75 per cent of the salesmen's salaries. Certain of the present functions of these salesmen were to perform work usually handled by construction detail men in larger utilities. One of the company's witnesses stated that more time was being devoted to sales effort promotion in the current year, and that one of the areas the company was trying to promote was gas air conditioning. Since the salesmen were concentrating on such sales promotion efforts, the commission did not think it would be reasonable to charge 75 per cent of their salaries to capital accounts.

Sales promotion expenses were recognized as legitimate expenses of a utility. The addition of air-conditioning load improves the overall utility load factor to the benefit of all customers. It seemed appropriate that those in the company's work force designated as salesmen should devote primary attention to sales efforts and that if construction detail work was required, it should be handled by other personnel.

Administrative Expense

The staff's estimate of administrative and general expense had been arrived at by using a "Four-Factor" allocation method which took into account the cost of gas, gross plant, average number of employees, and average number of customers in California compared to the company as a whole.

By using the cost of gas as one of the factors in the allocation formula, the commission noted, weight had been given to

the fact that there were large revenue-producing customers in Nevada to the end that California's large number of small residential customers were not carrying more than their fair share of general and administrative expenses. The administrative and general costs per customer for the California customers were lower than if the California operations were being conducted as a separate utility corporation and, therefore, the "Four-Factor" allocation formula was reasonable.

Depreciation

The staff had used a 2.6 per cent depreciation rate and the company had used straight-line depreciation rates varying from 3 to 6 per cent. The staff claimed that its 2.6 per cent rate met the depreciation objective of recovering the original cost of fixed capital (less estimated net salvage) over the useful life of the property by means of an equitable plan of charges to operating expenses or clearing accounts. It contended that the company's composite rate of 3.3 per cent did not meet that objective.

The company, however, argued that factors other than the physical condition of the property should be taken into consideration in arriving at depreciation rates. The company's bond indenture required a 4 per cent depreciation allowance in computing the bond renewal and replacement obligation. The staff had not made a physical examination in determining remaining useful life. The area served was arid and sparsely populated, and the company was relatively small in stature in the financial community. The staff's estimate was characterized by the company as the "office-statistical-study" of the theoretical asset lives used by the staff.

The commission found that the company was a relatively new utility with comparatively little depreciation experience. In view of this, it was considered more realistic to adopt a rate of 3 per cent for rate-making purposes.

"Associated Company" Adjustment

The staff advocated an adjustment to operating expenses because of dealings the utility had with a construction company, arguing that the construction company was an associated company because, of the three owners of the construction company, one was an officer of the utility and the other two had substantial positions therein. The staff's adjustment was predicated on reasonable salaries for the owners based on the work done and on holding the earnings of the construction company down to a 7 per cent return on the business it performed for the utility.

The company objected because counsel for the company's underwriters, in connection with a Securities and Exchange Commission registration statement, had determined that it was not an associated company. Based upon such special facts and circumstances, the commission held against the staff's position. However, the utility was placed upon notice that its conduct and that of its officials, as applied to the relationship, was frowned upon by regulatory authority and should not be continued.

Rate of Return

An interim order increasing rates so as to produce a return of 7 per cent on the net investment rate base was issued. The commission pointed out that the cost of money is not decisive of the issue of rate of return and that it did not rely solely on financial requirements in determining the level of such return. *Re Southwest Gas Corp. Decision No. 59032, Application No. 40743, September 22, 1959.*

Commodity Component of Demand-commodity Allocation Formula Used in Gas Rate Case

THE Wyoming commission held that a gas company had failed to establish any reasonable basis for the employment of the demand allocation component of the demand-commodity allocation formula. Therefore, the commission apportioned the company's net investment and associated expenses between demand and commodity customers on the basis of usage; *i.e.*, by using only the commodity allocation component of said formula. When the peak-day requirements of the demand customers of a natural gas company do not absorb the full capacity of its system, pointed out the commission, a division of total cost between the two classes of customers on a "volumetric" or usage basis is proper.

Test Period

The company had requested the commission to test revenue requirements on the basis of net investment, expenses, and revenues applicable to the current year instead of using a test period already concluded. The commission acceded to this request, noting that inflation and the increased cost of money necessitated adoption of a forward-looking view in the fixing of rates.

Franchise Adjustment

The company had assigned an arbitrary value to "franchise" and had contended that the amount should be included in the rate base. The commission held that the company should not be permitted to earn an income return on the valuation assigned to such an intangible asset.

A franchise gratuitously issued by a public authority to a utility granting it the right to perform service should not be capitalized in any amount against its customers, said the commission. Only the amount expended in obtaining the franchise from the issuing authority, which in this case was nothing, may be recouped through amortization charged to operating expense. Any additional amount paid by a purchaser or any arbitrary value assigned must be amortized out of surplus.

Acquisition of Defunct Plant

The company contended that it should be allowed to include in the rate base a pipeline facility it had purchased. Such a contention, said the commission, is based on the original cost theory of utility rate making, which requires a utility who purchases the properties of another operating utility to place the same on its books at original cost.

However, the propriety of inclusion hinges upon the utility status of the pipeline at the time the company acquires it. The evidence showed that the facility was defunct and abandoned at the time of acquisition and that it was not being used for any public purpose. In view of such evidence, the facility could properly be excluded from the rate base.

Merchandising Operation

Merchandising and jobbing operations of a natural gas company, irrespective of the load-building aspects, should not be considered as a part of utility business, pointed out the commission. The income and all operating expenses properly chargeable thereto should be excluded from income and expense accounts in a rate adjustment proceeding.

Exclusion, though, should be based upon proper allocation between utility and merchandising operations, not on an order directing the utility to physically segregate

merchandising and jobbing business from utility operations. The commission has no statutory authority to order the utility to discontinue the sale of gas appliances or to separate physically its merchandising and jobbing business from utility operations, it was held. The legality of joint operation or alleged unfair competition are questions of law for the courts to decide, and the propriety of physical separation is a matter for the legislature to determine.

Rate of Return

A modified rate increase was granted which would produce a return of 6.25 per cent on the net investment rate base. *Re Northern Utilities Co. Docket No. 9359, October 21, 1959.*

Other Recent Rulings

Prerequisite to Review. An application for rehearing of an order of the Federal Power Commission is an essential prerequisite to judicial review of the order, a federal appeals court held, and the presentation of a ground of objection in an application for rehearing is indispensable to judicial review on such ground. *Pan American Petroleum Corp. v. Federal Power Commission, 268 F2d 827.*

Federal Financing Approved. A proposal by the Solon Springs Telephone Company to purchase telephone property with funds from the Rural Electrification Administration was approved by the Wisconsin commission since it has no jurisdiction over such federal financing, other requirements of public convenience and necessity in the case being satisfied. *Re Aistad (Danbury Teleph. Co.) 2-U-5190, October 8, 1959.*

Electric Company Stock Issue. The Massachusetts commission was not disposed to require competitive bidding for a substantial issue of common stock by Boston Edison Company proposed to be sold under a negotiated underwriting agreement, where the company had experienced favorable results with prior negotiated arrangements. *Re Boston Edison Co. DPU 13071, September 25, 1959.*

Allocation of Pipeline Supplies. An equitable system-wide allocation of gas supplies of a pipeline company demands a comparative review of current market requirements supported by substantial evidence, the Federal Power Commission pointed out in ordering reopening of a record involving Michigan Wisconsin Pipe Line Company. *Re Michigan Wisconsin Pipe Line Co. et al. Docket Nos. G-13246, G-16998 et al. September 30, 1959.*

Two-part Rate Schedule. The Federal Power Commission authorized Michigan Wisconsin Pipe Line Company to establish a two-part demand and commodity type of rate in place of a straight commodity rate found to be inadequate for the company's present operations. *Re Michigan Wisconsin Pipe Line Co. Docket No. G-17512, September 30, 1959.*

Sufficiency of Notice. The Federal Power Commission held that notice initiating a rate proceeding and initial notice of the date of hearing appearing in the *Federal Register* constituted constructive

notice of the scope of the proceeding. *Re Pure Oil Co. Docket No. G-17930, September 30, 1959.*

Power Line Capacity Rental Charge. In disapproving a proposed transfer of a power line and lease back of reserve capacity, the Federal Power Commission pointed out that it must consider the sufficiency of the proposed rental charge for the reserve capacity in determining the issue of public interest under § 203 of the Federal Power Act. *Re Central Vermont Public Service Corp. et al. Opinion No. 329, Docket No. E-6839, October 12, 1959.*

Gas Exchange Abandonment Denied. The Federal Power Commission refused to permit Panhandle Eastern Pipe Line Company to abandon completely a gas exchange arrangement with Cities Service Gas Company, though it authorized abandonment of that part of the exchange not found to be required by Panhandle to meet its customer demand. *Re Panhandle Eastern Pipe Line Co. et al. Docket Nos. G-2374, G-16187, G-10956, October 12, 1959.*

Abandonment Ruled Out. In dismissing a natural gas producer application for abandonment, the Federal Power Commission pointed out that discontinuance of service by one producer upon assignment to, and commencement of identical production under the same terms and conditions by, another producer does not constitute abandonment within the meaning of § 7 (b) of the Natural Gas Act. *Re Barnwell Production Co. et al. Docket Nos. G-11493, G-13935, G-13970, October 6, 1959; Re Harper Oil Co. et al. Docket Nos. G-14947, G-15327, October 13, 1959.*

Producer Price Condition. The Federal Power Commission refused to certificate gas producer sales to United Gas Pipe Line Company from the North Henderson field area of Rusk county, Texas, except with a condition reducing a proposed price of 17 cents per Mcf to 15 cents, since the prevailing price was 14 cents, though the North Henderson field, being recently developed, was more expensive than older fields in nearby areas. *Re Phillips Petroleum Co. et al. Docket Nos. G-15514, G-15716, G-16923, October 13, 1959.*

Consolidated Return. The Minnesota commission considered reasonable a return of 9.44 per cent and an operating ratio of 94.93 per cent, which would result from increased rates authorized for two transit companies if they consolidated, as the commission recommended. *Re Minneapolis Street R. Co. Docket No. 409, Order No. 1487-3, October 8, 1959; Re St. Paul City R. Co. Docket No. 408, Order No. 1488-3, October 8, 1959.*

Money Costs Not Decisive. The California commission held that increased bond and preferred money costs are not decisive of the issue of rate of return, since the commission does not rely solely upon financial requirements in determining the level of the return, but balances the lawful interests of both consumer and investor. *Re Western Water Co. Decision No. 59067, Application No. 37826, September 29, 1959.*

Expense Allocation. The Pennsylvania commission considered a water company's method of prorating monthly expense for engineering and management service rendered by a corporation, owned by an individual who also owned eight other water companies in addition to the company involved in the proceeding, on the basis of the number of customers in each company

acceptable for rate-making purposes. *Cass et al. v. Hill Station Water Co. Complaint Docket No. 16789, July 20, 1959.*

Factors Affecting Discontinuance. The Massachusetts commission held that the existence of a loss operation or the possibility of effecting a saving by the elimination of service does not justify such elimination if there is a demonstrable public need for the service. *Re New York, N. H. & H. R. Co. DPU 12840, July 21, 1959.*

Similar Certificate Extensions. The Florida commission granted similar extensions of operating rights to six household goods carriers, authorizing operation from, to, and between all points and places in a certain county, in order to remove confusion brought about by the difficulty of determining what territory within the county was exempt from commission jurisdiction. *Re Daniels et al. Docket Nos. 5407-CCT et al. Order No. 4789, July 30, 1959.*

Crossing Costs. The Missouri commission directed a railroad to pay the costs of adequate crossing facilities at a reconstructed roadway and to pay the expense of furnishing and installing two reflectorized cross-buck warning signs since, although the commission thought it would be difficult to pinpoint the benefits accruing to the railroad on account of the crossing improvement, no crossing would have been necessary if the railroad tracks were not there. *Missouri State Highway Commission v. Gulf, M. & O. R. Co. Case No. 14,120, August 3, 1959.*

Bond Call Restriction. In view of the current high demand for funds and the consequent strong bargaining position of investors, the Georgia commission permitted a gas company placing an issue of 5⅜ per cent first mortgage bonds to impose a five-year restrictive call provision against refunding with lower cost debt money. *Re South Atlantic Gas Co. Docket No. 1455-U, File No. 19440, August 6, 1959.*

Attrition Considered. The California commission, in order to insure a water company's earning a return of 6.5 per cent on its depreciated rate base, which return the commission considered reasonable, authorized rates which would produce a return of 7.43 per cent, in view of an indicated decline of 0.93 per cent during the first year. *Re North Los Altos Water Co. Decision No. 58876, Application No. 40667, August 11, 1959.*

Emergency Rates. The Ohio commission found that an emergency existed warranting an immediate rate increase in the case of a water company which was sustaining a substantial annual loss from operations, though a bond was required to be posted to cover any refund that might later be ordered if the authorized rates should prove excessive. *Re G. A. Boeckling Co. No. 28599, August 21, 1959.*

Regulation of House Movers. The Colorado commission denied an application requesting it to prescribe rates and rules for movements by motor carriers of houses and buildings, on the ground that neither the public interest nor the benefit of the carriers established the necessity of regulation, though the carriers were left free to publish, either singly or jointly, rates and rules desired, provided the statutory standards of justice, reasonableness, and sufficiency were met. *Re Ryberg, Case No. 1585, Decision No. 53037, September 10, 1959.*

Record Reopened. The Federal Power Commission reopened the record in a proceeding for the allocation of an incremental gas supply of a pipeline company in order to permit a city, which had made an insufficient showing at the original hearing, to present further evidence of the economic and financial feasibility of its demand for service. *Re Michigan Wisconsin Pipe Line Co. et al. Docket Nos. G-13246, G-12871, G-12872 et al. September 28, 1959.*

Municipal Boundaries Not Applicable. The Colorado commission has held that the holder of a private motor carrier permit which authorizes service to a named municipality is entitled to serve the entire metropolitan community, not just residents living within the confines of the municipality's boundaries. *Re Ephraim Freightways, Inc. Application No. 16957-PP, Decision No. 53023, September 8, 1959.*

Construction Time Extension Denied. The Federal Power Commission denied a natural gas pipeline company a six-month extension of time in which to complete authorized construction, requested in order to enable the company to study the feasibility of constructing additional facilities; such additional facilities would require a new certificate application, whereupon the commission could consider the merits of the project. *Re East Tennessee Nat. Gas Co. Docket No. G-10460, August 25, 1959.*

Need for Rate Base Finding. The Wisconsin commission decided that findings as to rate base and return allowance were unnecessary in a proceeding involving application of an electric company's standard rates to newly acquired service areas where the overall effect of the rate changes involved a substantial reduction in revenues. *Re Northern States Power Co. 2-U-5220, September 8, 1959.*

Rates for Graded Telephone Service. The Minnesota commission, in authorizing a small telephone company to render graded service in lieu of rural multiparty service, approved a new rate schedule calculated to yield a return of 4.55 per cent. *Re Eagle Lake Teleph. Co. M-4568, September 14, 1959.*

Accounting for Acquisition Cost. The New York commission, in approving the sale of utility properties to another utility company at a price in excess of the net original cost less accrued depreciation, required that the excess of consideration over the original cost be charged off to surplus by the acquiring company. *Re Churchville Oil & Nat. Gas Co. et al. Cases 19746, 19747, September 15, 1959.*

Local Carrier Authority. The New York commission granted a bus company an extension of authority to conduct a contract service for a group of commuters in the city of New York, even though the city traffic commissioner would not consent to the operation, where the necessity of local consent was being litigated. *Re Monaco Stages, Inc. et al. Cases 20204, et al. September 15, 1959.*

Telephone Rate Increase. The Missouri commission approved a telephone company's application for increased rates, which would produce a return of 6.4 per cent on the net investment rate base. *Re A. & M. Teleph. Co. Case No. 14247, September 18, 1959.*

Industrial Progress

California Elec. Pwr. Plans To Spend $21,000,000

CALIFORNIA Electric Power Company's 1960 construction budget will exceed $21,000,000 and is the second largest annual construction expenditure in the company's 55-year history, Carl C. Ernst, Calectric president, announced recently.

It will be used to construct new power generating sources and to build and improve other facilities including transmission and distribution lines and substations throughout the company's service area.

Biggest single item in the 1960 budget is $9,412,000 for the construction of the 60,000 kilowatt cool water steam electric generating plant west of Barstow on the Mojave Desert. Construction of the new plant is another step in Calectric's long-range program of developing new power producing facilities to meet the rapid growth in its service area, the Calectric president said.

Almost $7,000,000 of the 1960 budget will be used to construct new distribution lines and related facilities and to improve existing ones. Over $3,000,000 is earmarked for construction of transmission lines and improvement of existing ones.

Babcock & Wilcox Receives $6-Million Boiler Contract From Baltimore Gas & Electric

THE Babcock & Wilcox Company reported recently the receipt of a contract for more than $6-million to manufacture and install a Cyclone furnace fired radiant boiler to serve the second turbine-generator unit in the Baltimore Gas and Electric Company's new Charles P. Crane station, near Chase, Md. The first unit, now under construction, is expected to begin operating about mid-1961.

Designed for a pressure of 2775 pounds per square inch and to operate at a pressure of 2475 pounds per square inch at the superheater outlet, the boiler will supply 1,360,000 pounds of steam per hour to the throttle of a nominally rated 183,000 kilowatt turbine at a pressure of 2400 pounds per square inch and a temperature of 1050 degrees Fahrenheit, and will reheat the steam to 1000 degrees F.

The unit will be equipped with four Babcock & Wilcox Cyclone furnaces. These will develop a heat input of 1,741,000,000 BTU's per hour while burning 129,000 pounds of bituminous coal. A semi-outdoor installation, this second boiler is scheduled to go online early in 1963.

When the second unit enters commercial service, it will increase Baltimore Gas and Electric Company's total steam-electric generating capacity to 1,471,500 kilowatts. The utility serves a population of approximately 1,800,000 people in a 2,283-square mile area.

Named for Baltimore Gas and Electric Company's present chairman of the board, the Charles P. Crane Station is located about nine miles east of Baltimore on a tributary of the Chesapeake Bay.

American Electric to Erect A Unit Near St. Joseph, Mich.

AMERICAN Electric Power System announced recently that it has selected a 480-acre site along the southeastern shore of Lake Michigan for a major power plant. American Electric's subsidiary, Indiana & Michigan Electric Company, will build, own and operate the plant. The site is between Lake Michigan and U. S. Route 12, nine miles south of St. Joseph, Mich.

Philip Sporn, president of American Electric, said the type of fuel to be used in the power plant has not been determined but either coal or oil could be utilized. When technological developments make it economical, there is a possibility of using atomic fuel, he said.

Houston Lighting Plans $40 Million Program in 1960

HOUSTON Lighting and Power Company plans to spend about $40,000,000 for capital expansion in 1960. This will be down from "just under $60,000,000 in 1959 and a record $62,372,327 in 1958," according to T. H. Wharton, president.

Philadelphia Electric to Spend $88 Million in 1960

PHILADELPHIA Electric Company will spend "in the neighborhood of $110 million" on capital building in 1959, according to R. G. Rincliffe, president. Next year, the company plans to spend about $88,000,000 for expansion.

American Gas Association's Public Information Program Wins Major National Award

THE American Gas Association's PAR Public Information Program has earned national recognition for gas industry public relations activities for the second consecutive year, winning a major award presented by the American Society of Association Executives.

The Society named A. G. A. the Grand Award winner in the large national association class during ASAE's 40th annual international meeting November 15-22 in Boca Raton, Fla. The gas association was cited for its "outstanding activities for public service."

In 1958, the Public Information Program won the "Public Relations News" Achievement Awards as "one

(*Continued on page* 20)

of the 10 best public relations programs in the United States."

In presenting the award, ASAE said that "the American Gas Association's highly successful efforts resulted in a fuller understanding of the value of good public relations by member companies and a desire by employees to utilize public relations tools to promote the industry. The program further increased interest by the press and the public at large in the gas industry, as well as by the financial community. Finally, the program developed a high caliber of job applicants for positions, resulting in better personnel and more efficient and enlightened operations throughout the industry."

The awards jury, headed by Frederick H. Mueller, United States Secretary of Commerce, included Dr. George Bennett, director of The Psychological Corp.; Dr. A. D. Bruce, president of the University of Houston; Erwin D. Canham, president of the United States Chamber of Commerce and editor of The Christian Science Monitor; and Stanley C. Hope, president of the National Association of Manufacturers.

The Public Relations Program w organized in 1955 under A. G. A PAR Plan (Promotion, Advertisi and Research). Participating su scribers. include more than 130 lea ing gas utility and pipeline compani in the United States and Canada.

Univac Service Centers Subject of R-R Folder

HOW Univac Service Centers a solving everyday management pro lems for business concerns throug out the country is the subject of colorful, illustrated 6-page folder ju published by Remington Rand Div sion of Sperry Rand Corp.

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VEPCO 5-Year Program Costs $275,330,000

DURING the last five years, Virginia Electric and Power Company has spent $275,330,000 in the construc tion of new facilities and plants, A H. McDowell, Jr., reported at the company's recent quarterly meeting

New additions costing millions o dollars have been added to generating stations at Yorktown, Portsmouth and Bremo.

A new multi-million dollar addition to the company's Chesterfield Power Station is currently under construc tion. Plans are already underway for

(*Continued on page 22*)

"Workshop-on-Wheels" DODGE TRADESMAN for 1960 helps you accomplish more... in shorter time

There's a place for almost everything in the Tradesman. Tools, fittings and supplies stow neatly in lock-up compartments, safe from weather damage and theft. For larger items, there's a spacious floor 7½ feet long . . . with sliding roof available. The Tradesman is organized for quick job-handling, and is perfect for public utilities service!

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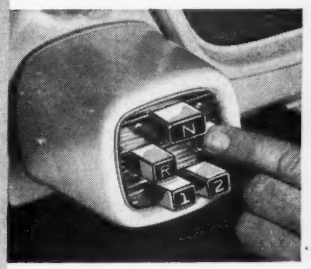

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a $32,500,000 fourth unit at Possum Point as well as a $30,500,000 addition to the Portsmouth Power Station.

McDowell said a total of $37,420,000 were spent during the first ten months of 1959 of an estitimated 1959 construction budget of $53,000,000.

Natural Gas Pipeline Co. Plans $31.1 Million Expansion

NATURAL Gas Pipeline Company of America, a subsidiary of Peoples Gas Light & Coke Company has asked the Federal Power Commission to approve an expansion of pipeline facilities at an estimated cost of $31,188,000.

The project would increase delivery capacity of Natural Gas Pipeline Company by 100 million cubic feet of gas per day to 830 million cubic feet. Added supplies would go to customer utilities in the Chicago area, including 40 million cubic feet daily to Peoples Gas.

Major items planned are 151 miles of 36-inch supplementary pipeline between Ford County, Kansas, and Joliet, Illinois, and a 180-mile 24-inch line between Minneola, Kansas, and Kiowa County, Oklahoma.

Gas Utilities Will Spend $34,400,000,000

ACCORDING to a prediction by the American Gas Association, the gas utility industry will spend $34,400,000,000 on construction by the end of 1970. This amount will nearly triple the value of the gas utility and pipeline industry's gross plant.

Mosler Introduces New High Volume Rotary File

A NEW high volume card file that provides instant access to any one of 200,000 cards in less than three seconds was introduced recently by the Moler Safe Company.

Called the "Selectronic Record File," the unit is designed to house any size card. Trays to hold records of different sizes may be used simultaneously.

The file is controlled by a Selectronic keyboard with recessed selector keys. A touch of a key engages a "Selectronic Brain" which determines the direction of rotation to bring the cards to the operator in less than three seconds.

Its speed and easy accessibility make the Selectronic File ideal as a central housing for all records, Jose Castellanos, head of Mosler's Systems Division, pointed out. One clerk can easily reach the controls and perform every operation while comfortably seated, he added. The File takes only 84⅝ inches by 39¾ inches of floor space.

Federal Pacific Announces New Low-Cost 600 Volt 200,000 Amp Circuit Protection Device

THE "Fusematic," a new 600 volt 200,000 amp coordinated fuse-breaker unit—that offers fault circuit protection at a substantially lower cost than if a conventional breaker alone were used—is being introduced by Federal Pacific Electric Company.

An integral unit combining components of conventional low-voltage power circuit breakers and current-limiting fuses, Fusematic is rated up to 1,600 amp continuous and 200,000 amp interrupting capacity. Its primary application is for service entrance and feeder protection where high fault current exists.

In this application it offers faster interruption as well as better protection, since the current limiting fuses actually reduce possible fault current.

Further information can be obtained from Federal Pacific Electric Company, General Offices, 50 Paris street, Newark 1, New Jersey.

Recording Machine Developed By Dictaphone for Packaging And Storing Sound

A PRACTICAL means of packaging and storing sound, and of reproducing it when needed, is provided by the Dictaphone Dictalog Recording Machine, a new communications recording machine developed by Dictaphone Corporation for use by business, by federal, state and municipal agencies, and by the armed services.

Among specific uses for which the Dictalog is designed are conference recording, the recording of police and fire department, and of air and highway traffic control communications, and the monitoring of radio broadcasts. The recording medium is an 8½ by 11-inch plastic belt coated with magnetic pigment, which can be filed in an ordinary filing cabinet when it has recorded its quota of communications.

The machine operates with two belts, each taking two hours of recording. A total of four hours of unattended and uninterrupted recording is provided for by automatic chan over from one belt to the other. A part of either belt can be played b while recording, and recording continue on one belt when a filed is taken from the files and placed the machine for play-back.

Carriage control pinpoints reco ed messages, making it easy to f messages when it is desired to produce them. Signal lights tell wh power is on, when machine is reco ing, and when it is time to chang belt. Recordings can be erased, s belts can be reused when it is longer necessary to store the record communications.

Westinghouse Creates Two N Positions in Power Transforme Quality Control Department

IN order to make the quality co trol in its transformer division ev stronger and more effective, Westin house Electric Corporation has creat the positions of manager and assist manager of the power transform quality control department. Mr. L J. Besch has been appointed to t new position of manager, and M John H. Bell will assume the duti of assistant manager.

Power Plant Repairs

THE facilities of Arthur Tickle E gineering Works, Inc., 21 Deleva street, Brooklyn 31, New York, a described and illustrated in a ne brochure, copies of which are availab on request.

Among the services offered to uti ties and industrial power plants a turbine reblading and balancing, al minum oxide blasting both on site an in the Tickle plant, Al-Fin bondi of aluminum skirts on diesel piston hot-dip aluminum coating, grindi and metal spraying. The brochure al gives a partial list of machine too available for power-plant repair an restoration work.

Reactor Energized At Allis-Chalmers Greendale Laboratories

SUCCESSFUL initial operation o Wisconsin's first critical facility wa completed recently at the Allis Chalmers Greendale (Wis.) Labora tory. The license authorizing the op eration of this test facility was issue by AEC following final inspection o the reactor. The new laboratory part of the Nuclear Power Depar

nt's administrative and physical testing quarters, oc-ied about a year ago.

A pit in the floor of a reinforced concrete room uses the water-moderated, unpressurized, heterogene-s type reactor with a maximum power rating of 100 tts (thermal). The nuclear reactor will normally be era ed at essentially zero power output.

The cylindrical core contains two regions. An outer nular region, duplicating the boiling region of a power ctor, contains uranium dioxide fuel pellets in sealed minum pins. The inner region is the nuclear super-ater and will be fueled by tubular fuel elements. Each these elements consists of two concentric fuel tubes ntained in a stainless steel housing tube. Fuel tubes composed of uranium oxide-stainless steel cement, d with stainless steel.

This critical facility will be used to obtain important ysics data essential for the design of a large 204,000 (thermal) Controlled Recirculation Boiling Reactor th nuclear Superheater. This reactor will be part of e Pathfinder Atomic Power Plant being built by Allis-almers for Northern States Power Company.

American Nuclear Society Elects Two Westinghouse Executives To Grade Of 'Fellow'

WO atomic power executives of the Westinghouse ectric Corporation have been elected to the grade of ellow" by the American Nuclear Society's board of rectors for "scientific and engineering attainments." John W. Simpson, Westinghouse vice president in arge of the company's atomic power division, and Dr. dney Krasik, technical director of the Westinghouse tronuclear laboratory, were elevated to the Society's ecial membership status at an election held at the or-nization's winter meeting in Washington, D. C.

The American Nuclear Society, with 3,200 members, a professional society devoted exclusively to atomic ergy and related fields of science and engineering.

The special membership status provided for the So-ety's constitution is granted on the basis of "outstand-g and recognized contributions to the advancement of ience and engineering relating to the atomic nucleus, the teaching thereof, or . . . demonstrated leadership a nuclear enterprise of substantial scope."

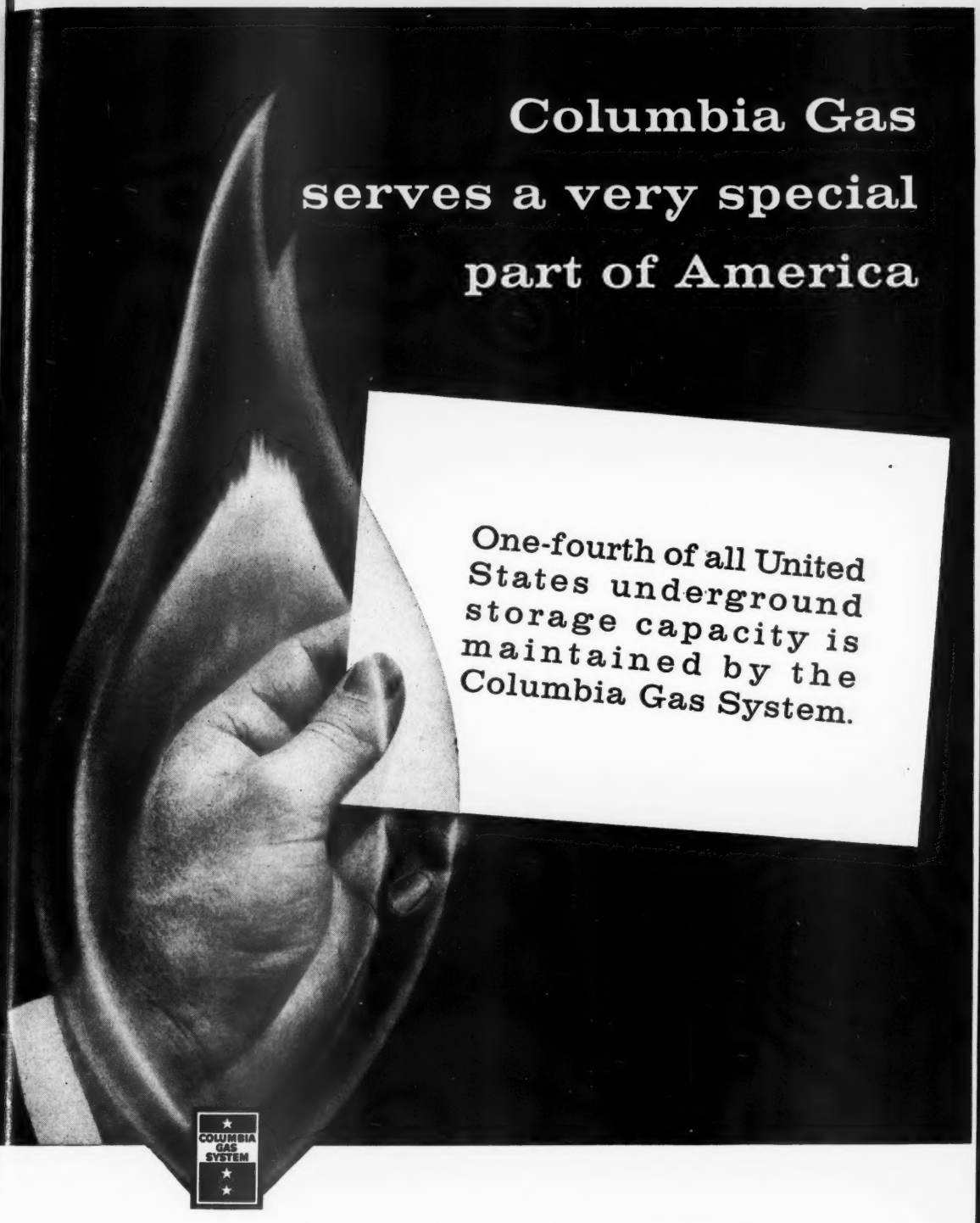
Forty-two other members of the Society also received e membership grade of "Fellow." It was the first oup to be so honored by the Society.

4-Story High Boiler Being Erected At Consumers Power Company's Dan E. Karn Plant

HE Babcock & Wilcox Company reported recently has started erection of a 14-story high boiler at the onsumers Power Company's new Dan E. Karn plant Essexville, Mich., which is near Bay City.

Steam generated by the boiler will be used to produce 55,000 kilowatts of electrical power for the utility. Cur-nt total capacity of Consumers' system, which services ost of Michigan's lower peninsula, is 2,270,000 kilo-at s.

Designed for a pressure of 2700 pounds per square ch, the huge boiler will have a rated continuous steam ow of 1,750,000 pounds per hour at a pressure of 2450 si and a temperature of 1050 degrees Fahrenheit at the uperheater outlet. The reheat steam temperature will e 1000 degrees F. When operating at rated capacity, the nit will burn more than 200,000 pounds of coal per hour. uilt by Babcock & Wilcox, the boiler is scheduled to nter service during the spring of 1961.



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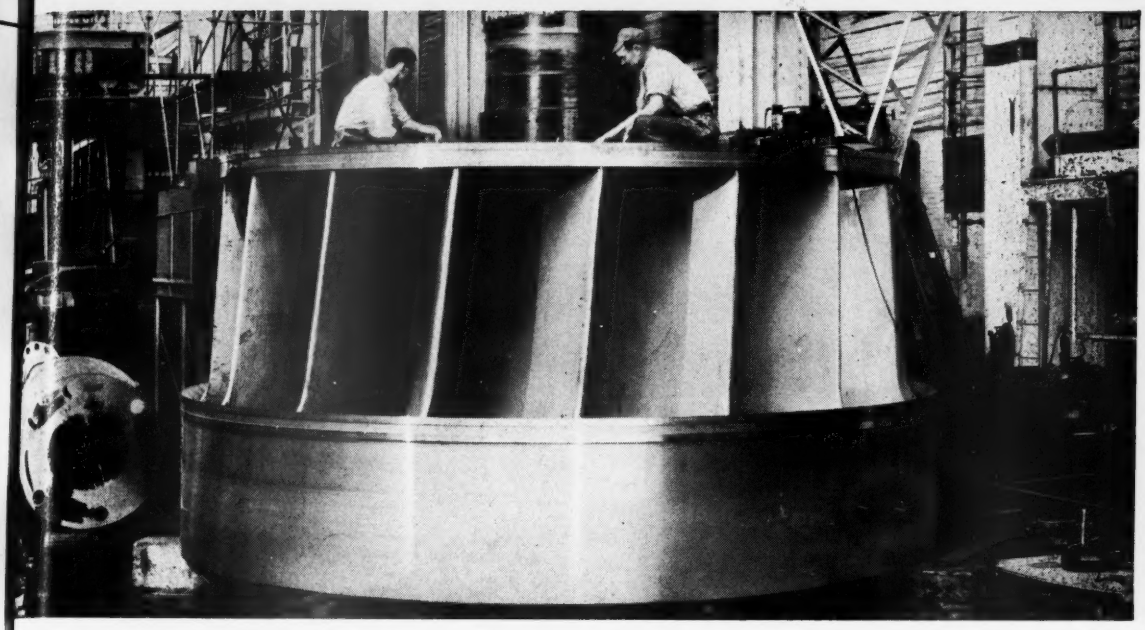
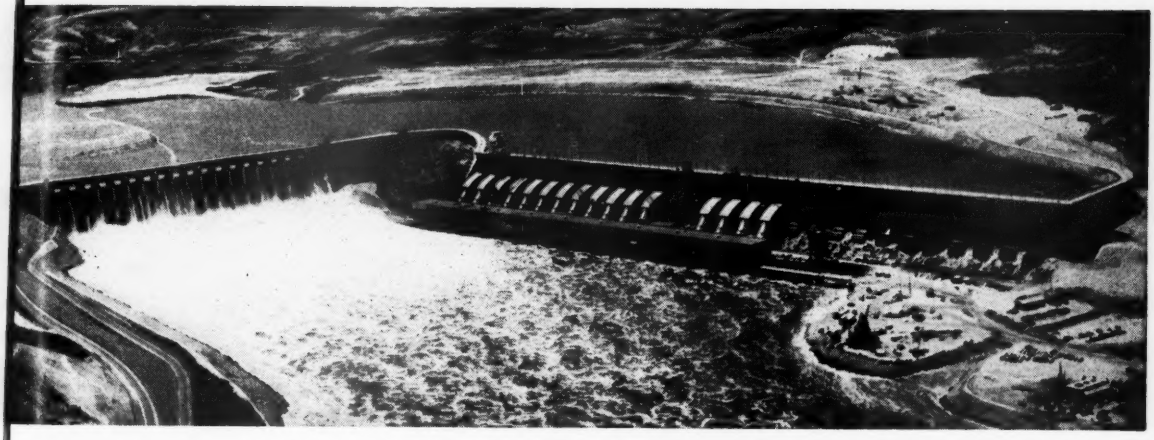
*Fortnightly advertisers not in this issue.



Newport News builds 10 unique runners



For Chief Joseph Dam in Washington State

Cast buckets are welded to cast crown and band—then stress relieved

The Francis-type runner above illustrates Newport News' complete facilities for fabricating heavy equipment.

It also illustrates the specialized techniques Newport News frequently uses in jobs of this type. Gibson tests for these units are very favorable.

Before you go ahead on a project like this, be sure to get a bid from Newport News. Whether it's penstocks, butterfly valves, pumps or turbines, you'll get the benefit of the modern plant methods and production facilities of one of the country's oldest and largest builders of water power equipment.

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In 1952 Pioneer joined with other groups all reporting to the Atomic Energy Commission, in constant study of atomic energy applications. Today Pioneer is qualified as a consultant to industry in the application of atomic reactor systems to the generation of electric power. Presently, Pioneer is acting as architect-engineer and supervisor of construction of the 66,000 kw commercial atomic power plant shown here. Allis-Chalmers Mfg. Co. is the prime contractor. Scheduled for 1962 completion, the plant, for the Northern States Power Co., will be known as the "Pathfinder".

Organized as Central Utilities Atomic Power Associates, these utilities will share in the research and development costs: Northern States Power Co., Central Electric and Gas Co., Interstate Power Co., Iowa Power and Light Co., Iowa Southern Utilities Co., Madison Gas and Electric Co., Mississippi Valley Public Service Co., Northwestern Public Service Co., Ottertail Power Co., St. Joseph Light and Power Co., Wisconsin Public Service Corp.

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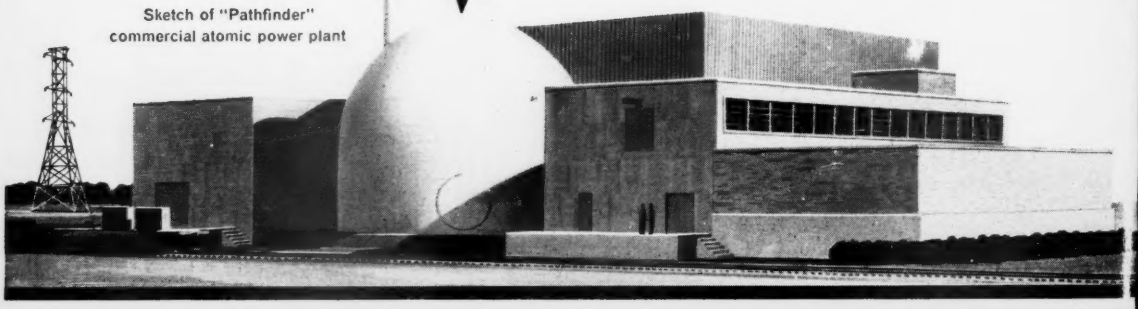
Write for 40-page booklet, "Pioneering New Horizons in Power". Describes, illustrates Pioneer's engineering services, and corporate services, from financing to operation.

Sketch of "Pathfinder" commercial atomic power plant



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